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AIRBORNE COMMAND POST COMMUNICATIONS EQUIPMENT CAREER
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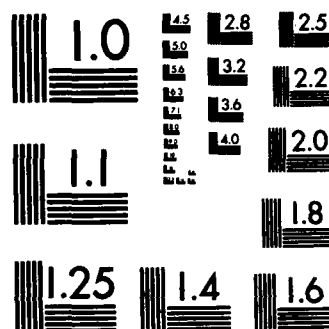
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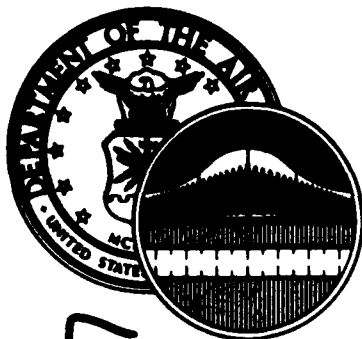
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UNITED STATES AIR FORCE

AD-A136007

OCCUPATIONAL SURVEY REPORT



AIRBORNE COMMAND POST COMMUNICATIONS
EQUIPMENT CAREER LADDER

AFSCs 32835, 32855, 32875, A32835,
A32855, AND A32875

AFPT 90-328-480

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OCCUPATIONAL ANALYSIS PROGRAM
USAF OCCUPATIONAL MEASUREMENT CENTER
AIR TRAINING COMMAND
RANDOLPH AFB, TEXAS 78150

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PREFACE

This report presents the results of a detailed Air Force Occupational Survey of the Airborne Command Post Communications Equipment Career Ladder (AFSCs 32835, 32855, 32875, A32835, A32855, A32875). The project was directed by USAF Program Technical Training, Volume Two, Section VIII, dated February 1981. Authority for conducting occupational surveys is contained in AFR 35-2. Computer printouts from which this report was produced are available for use by operating and training officials.

The survey instrument was developed by Capt Gary Patterson, Inventory Development Specialist. Second Lieutenant Candy E. T. Otte, Occupational Survey Analyst, analyzed the data, and wrote the final report. Ms Olga Velez provided computer programming support for the project. This report has been reviewed and approved by Lieutenant Colonel Jimmy L. Mitchell, Chief Airman Career Ladders Analysis Section, Occupational Analysis Branch, USAF Occupational Measurement Center, Randolph AFB, Texas 78150.

Copies of this report are distributed to Air Staff sections, major commands, and other interested training and management personnel (see distribution list). Additional copies are available upon request to the USAF Occupational Measurement Center, Attention of the Chief, Occupational Analysis Branch (OMY), Randolph AFB, Texas 78150.

This report has been reviewed, and is approved.

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SUMMARY OF RESULTS

1. Survey Coverage: The Airborne Command Post Communications career ladder was studied at the request of Keesler Technical Training Center. A job inventory was administered worldwide between August 1982 and March 1983. All major commands were well represented, and 274 respondents comprise the final survey sample.
2. Career Ladder Structure: There were two clusters and five independent job types identified in the analysis: general equipment repair personnel, flightline and shop maintenance personnel, receiver and transmitter repair personnel, AFSATCOM personnel, radio repair personnel, administrative and supervisory personnel, and formal training personnel. In general, job groupings revolved around types of systems maintained (aircraft oriented), and where maintenance was performed (flightline or shop).
3. Career Ladder Progression: The 3- and 5-skill level jobs were highly technical, with very little responsibility for supervision or management displayed. DAFSC 32875 airmen, while still performing many technical tasks, spent the majority of their time in supervisory, managerial, and administrative functions.
4. AFR 39-1 Specialty Description: The current description was found complete, and accurately portrayed the nature of the job.
5. Experience Group Differences: As time in service increased, there was a corresponding increase in the performance of duties involving supervision, management, and administration. Job satisfaction indicators were high for all groups. First-term airmen, however, as compared to the other enlistment personnel, had a slightly lower perception as to how well their training was utilized.
6. MAJCOM Differences: Many basic general maintenance tasks and procedures were performed in common by relatively high percentages of personnel in all commands. Generally, however, system specific tasks performed and time spent on those tasks appeared to vary, based on the dominant types of aircraft maintained, and the MAJCOM missions.
7. Training Analyses: The 328X5 STS is well supported by survey data. Only one task was performed by a high percentage of personnel, with a high training emphasis, which was not referenced to the 328X5 STS. The POI was also generally well supported by survey data with only a few course blocks requiring review by subject-matter and training specialists due to low percent performing or training emphasis ratings. There was only one task not matched to the 328X5 POI which requires review for possible coverage in the course.
8. Implications: Based on the survey data, certain areas of the career ladder documents should be reviewed and modified by subject-matter specialists.

OCCUPATIONAL SURVEY REPORT
AIRBORNE COMMAND POST COMMUNICATIONS EQUIPMENT
CAREER LADDER
(AFSC 328X5/A328X5)

INTRODUCTION

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This is a report of an occupational survey of the Airborne Command Post Communications Equipment (AFSCs 32835, 32855, 32875, A32835, A32855, and A32875) career ladder completed by the Occupational Analysis Branch, USAF Occupational Measurement Center, in March 1983. This survey was requested by Keesler Technical Training Center to ascertain whether additional training requirements were necessary due to new systems and equipment, and to provide data for review and possible update of the Specialty Training Standard (STS). There are no previous survey results regarding the 328X5 career ladder.

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Background

The Airborne Command Post concept was introduced by the Strategic Air Command (SAC) in 1959. At that time, personnel held AFSCs 328X0, 328X0A, or 32894, and were known as Avionics Communications Specialists. After October 1978, AFSC 328X0A was changed to 328X5. Authorized lateral entries were accepted from AFSC 304X4, Ground Radio Communications, and AFSCs 328X0 and 328X1, Avionic Communications and Avionic Navigation Systems Specialties.

Aside from the actual entries from the AFSCs listed above, cross trainees were also received from AFSCs 328X4, Avionics Inertial and Radar Navigation; 304X0, Wideband Communication Equipment; and 316XX, Titan (LGM-25) Missile System Career Ladders. Individuals possessing an electronics background started at Block Seven of the then 23-block course. Those from nonelectronic backgrounds attended the course in its entirety.

The last entries for lateral retraining were in November 1979. Those classes continued until the students graduated in the first half of 1980, after which ABR32835 was fully implemented. The basic course established in late 1979 was 23-blocks, and approximately 32 weeks long. Around the middle of 1981, AFSATCOM training was added, causing the basic course to be restructured to a 25-block course, 34 weeks in length. Although the original program was designed for nonprior service graduates, approximately 20 percent have been prior service during the past few years.

The primary responsibilities of personnel in the 328X5 career ladder, as described by AFR 39-1 Specialty Descriptions, are inspecting, troubleshooting, repairing, overhauling, modifying, removing, installing, aligning, and operating airborne command post communications equipment; and supervising airborne command post communications operations and maintenance activities.

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SURVEY METHODOLOGY

Inventory Development

The data collection instrument used for this occupational survey was USAF Job Inventory AFPT 90-328-480, dated August 1982. A tentative task list was formulated during visits with personnel at Keesler Technical Training Center (KTTC) to include tasks resulting from the use of specialty training standards and other career ladder documents as a guide. The tentative task list was refined and validated by subsequent visits to operational units with 328X5 personnel assigned. From this process, a final inventory consisting of 902 tasks grouped under 26 duty headings was developed.

The 328X5 inventory consisted of three sections: (1) biographical information which included items such as name, SSAN, number of months on current job, and number of months military service; (2) a background information section which included questions about such items as job satisfaction, equipment used, type of organization, job title, and training courses completed; and (3) a task section listing all tasks performed by career ladder personnel. Respondents first checked the tasks they performed, and then rated each task as compared to all other tasks checked. The rating scale ranged from one (very small amount of time spent), to nine (very large amount of time spent), with a rating of five representing an average amount of time spent performing a task. To determine the relative amount of time spent on each task, all of the individual's ratings were assumed to account for 100 percent of his or her time on the job. The ratings were then summed and each rating was divided by the total number of task responses, and multiplied by 100. This procedure provides a basis for comparing tasks, not only in terms of percent members performing, but also in terms of average percent time spent.

Survey Administration

From August 1982 to March 1983, job inventories were administered by local consolidated base personnel offices to all DAFSC 328X5 personnel at the 3-, 5-, and 7-skill levels who were eligible to participate in the survey. Members eligible to participate in the survey were selected from Uniform Airmen Record (UAR) data tapes generated by the Air Force Human Resources Laboratory (AFHRL).

Task Factor Administration

In addition to completing the job inventory, selected senior 328X5 personnel were also asked to complete a second booklet for either training emphasis (TE), or task difficulty (TD). The TE and TD booklets are processed separately from the job inventories. The rating information is then used in a number of different analyses discussed in more detail within this report.

Task Difficulty. Each individual completing a task difficulty booklet was asked to rate all of the tasks on a 9-point scale (from extremely low to extremely high) as to the relative difficulty of each task in the inventory. Difficulty is defined as the length of time required by the average member to learn to do the task. Task difficulty data was independently collected from 23 experienced 5- or 7-skill level 328X5 personnel stationed worldwide. The interrater reliability (as assessed through components of variance of standardized group means) was .89, indicating high agreement among TD raters. Ratings were adjusted so tasks of average difficulty have ratings of 5.00 and a standard deviation of 1.00. The resulting data is essentially a rank ordering of tasks indicating the degree of difficulty for each task in the inventory.

Job Difficulty Index (JDI). After computing the combined 328X5 task difficulty index for each task item, it was possible to compute a Job Difficulty Index (JDI) for the job groups identified in the survey analysis. This index provides a relative measure of which jobs, when compared to other jobs identified, are more or less difficult. An equation, using the number of tasks performed and the average difficulty per unit time spent (ADPUTS) as variables, is the basis for the JDI. The index ranges from 1.0 for very easy jobs to 25.0 for very difficult jobs. The indices are adjusted so the average JDI is 13.00. Thus, the more time a group spends on difficult tasks, and the more tasks they perform, the higher the JDI.

Training Emphasis. Individuals completing training emphasis booklets were asked to rate tasks on a 10-point scale from no training required to extremely heavy training required. Training emphasis is a rating of which tasks require structured training provided at resident technical schools, field training detachments (FTD), mobile training teams (MTT), formal OJT, or any other organized training method. Training emphasis data was independently collected from 29 experienced 328X5 5- or 7-skill level personnel stationed worldwide. The interrater reliability (as assessed through components of variance of standard group means) was .90, indicating there was good agreement among raters as to which tasks required some form of structured training and which did not. The average training emphasis rating was 2.47, with a standard deviation of 1.51.

When used in conjunction with other factors, such as percent members performing, task difficulty and training emphasis ratings can provide an insight into training requirements. This may help validate the lengthening or shortening of specific units of instruction in various training programs.

Survey Sample

Personnel were selected to participate in this survey to ensure an accurate representation across all MAJCOM and paygrade groups. In this study, all eligible personnel holding DAFSC 328X5, with 3-, 5-, and 7-skill levels, were solicited for their responses. Table 1 reflects the major command distribution of personnel assigned to the 328X5 specialty as of June 1982. Table 2 reflects the percentage distribution by paygrade. Table 3 reflects the distribution of the survey sample in terms of TAFMS groups. Overall, a representative sample was obtained with 274 (79 percent) respondents sampled from the 346 available members of this career ladder.

TABLE 1
COMMAND REPRESENTATION OF SAMPLE

<u>COMMAND</u>	<u>AFSC 328X5</u>	
	<u>PERCENT OF ASSIGNED</u>	<u>PERCENT OF SAMPLE</u>
SAC	53	59
USAFE	16	14
ATC	15	12
TAC	7	10
PACAF	8	4
AFLC	*	*
AFSC	*	*

TOTAL 328X5 PERSONNEL ASSIGNED - 382

TOTAL 328X5 PERSONNEL ELIGIBLE FOR SURVEY** - 346

TOTAL 328X5 OCCUPATIONAL SURVEYS RETURNED - 274 (79%)

PERCENT SAMPLED - 72%

* DENOTES LESS THAN ONE PERCENT

** EXCLUDES PERSONS IN PCS STATUS, HOSPITAL, OR LESS THAN SIX WEEKS
ON THE JOB

NOTE: MANNING FIGURES AS OF JUNE 1982

TABLE 2
PAYGRADE DISTRIBUTION OF SURVEY SAMPLE

<u>PAYGRADE</u>	<u>AFSC 328X5*</u>	
	<u>PERCENT OF ASSIGNED</u>	<u>PERCENT OF SAMPLE</u>
AIRMEN	25	25
E-4	19	18
E-5	31	32
E-6	17	16
E-7	8	9
E-8	0	0

* DOES NOT REFLECT 9-SKILL LEVEL PERSONNEL

NOTE: MANNING FIGURES ARE AS OF JUNE 1982

TABLE 3
TAFMS DISTRIBUTION SAMPLE

	<u>MONTHS TOTAL ACTIVE FEDERAL MILITARY SERVICE</u>					
	<u>1-48</u>	<u>49-96</u>	<u>97-144</u>	<u>145-192</u>	<u>193-240</u>	<u>241+</u>
NUMBER IN SAMPLE	102	44	56	34	30	8
PERCENT OF SAMPLE	37%	16%	20%	13%	11%	3%

SPECIALTY JOBS (Career Ladder Structure)

The diversity of jobs within a career ladder can greatly impact on the Air Force personnel classification policy, technical training, and on-the-job training (OJT). This section of the report includes descriptions of jobs within the specialty and how they relate to one another. These relationships are determined through a computer analysis of job similarity using the Comprehensive Occupational Data Analysis Program (CODAP), and are addressed in some detail in the following pages.

CODAP consists of a series of computer programs which generate number of statistical products used in the analysis of career ladders. The primary product used to analyze a career ladder structure is a hierarchical clustering of all jobs, based on the similarity of tasks performed and relative time spent. Each individual job description in the sample (each person completing a job inventory) is compared to every other job description in terms of tasks performed, and the relative amount of time spent on each task in the job inventory. The automated system is designed to locate the two job descriptions with the most similar tasks and percent time ratings, and combine them to form a composite job description. In successive stages, new members are added to the initial groups, or new groups are formed, based on the similarity of tasks and time ratings in each individual job description. This procedure is continued until all individuals and groups are combined to form a single composite representing the total sample. This process permits identification of the major types of work being performed in the occupation (career ladder), and is analyzed in terms of the job description and background data of each type of job. This information is then used to examine the accuracy and completeness of career ladder documents (AFR 39-1 Specialty Descriptions and Specialty Training Standards), and to formulate an understanding of current utilization patterns.

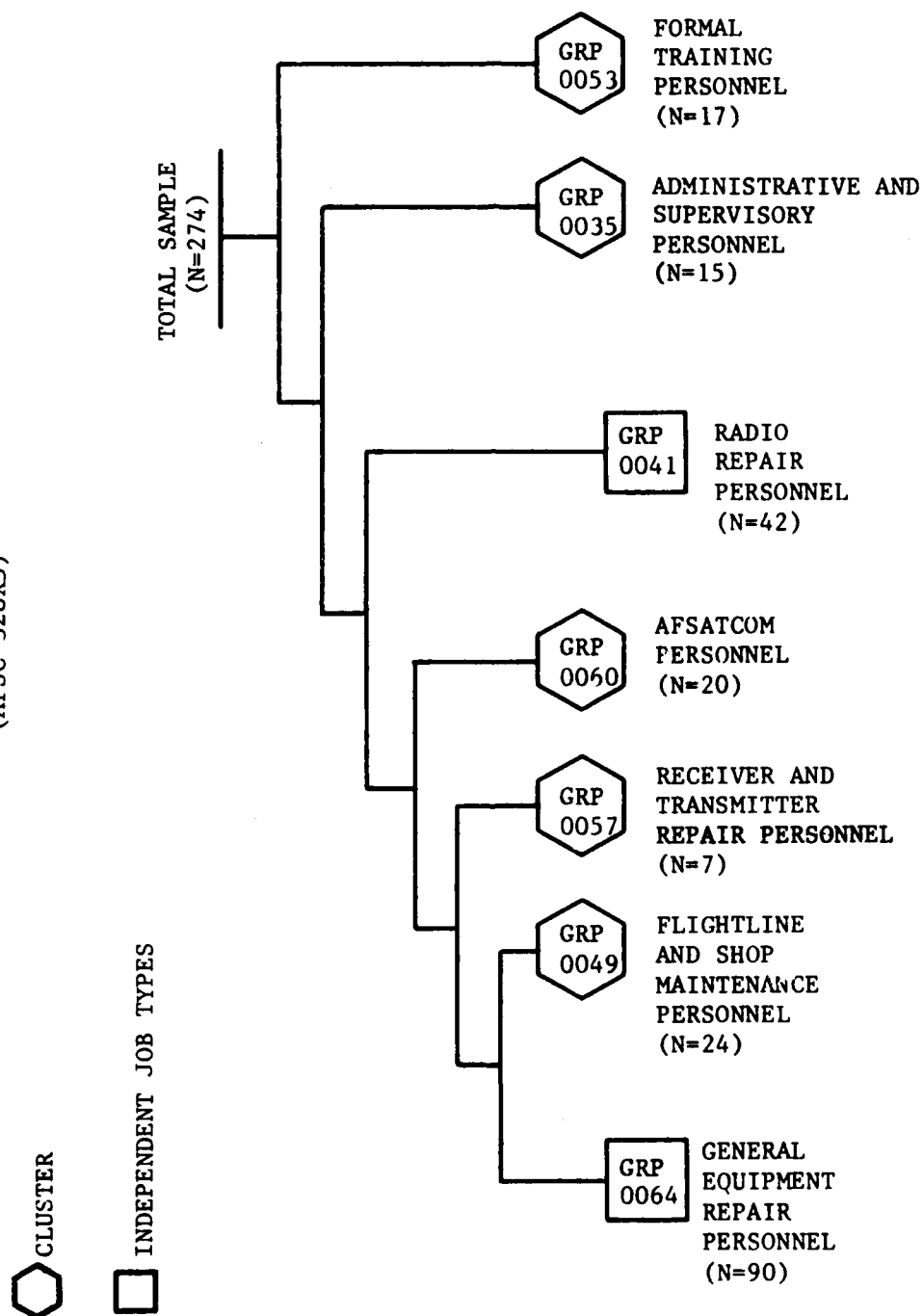
The basic identifying group used in the hierarchical job structuring process is the Job Type. A job type is a group of individuals who perform many of the same tasks, and spend similar amounts of time performing them. When there is a substantial degree of similarity between different job types, they are grouped together and labeled as a cluster. Unique groups composed of specialized job types, that are too dissimilar to be grouped within a cluster, are labeled Independent Job Types (IJTs).

Specialty Overview

Based on the similarity of tasks performed and the relative amount of time spent on each task, two clusters were identified. Both clusters contained two or more variations which will be discussed within the clusters as a whole, rather than as specific, job types. Also identified were five independent job types.

The job groups found within the 328X5 survey sample are listed below and illustrated in Figure 1. The group (GRP) number shown beside each title is a reference to computer printouts provided to selected users. The letter N stands for the number of personnel in the group.

FIGURE 1
CAREER LADDER STRUCTURE
(AFSC 328X5)



- I. GENERAL EQUIPMENT REPAIR PERSONNEL CLUSTER (GRP064, N=90)
- II. FLIGHTLINE AND SHOP MAINTENANCE PERSONNEL (GRP049, N=24)
- III. RECEIVER AND TRANSMITTER REPAIR PERSONNEL (GRP057, N=7)
- IV. AFSATCOM PERSONNEL (GRP060, N=20)
- V. RADIO REPAIR PERSONNEL CLUSTER (GRP041, N=42)
- VI. ADMINISTRATIVE AND SUPERVISORY PERSONNEL (GRP035, N=15)
- VII. FORMAL TRAINING (GRP053, N=17)

Seventy-eight percent of the respondents in the sample perform jobs generally equivalent to the two clusters and five independent job types listed above. The remaining 22 percent were performing tasks or series of tasks that defied grouping with any of the defined job types. Some of the job titles given by respondents which were representative of these personnel included Airborne Command Post Civil Engineer Repairman, Quality Control Inspector, AMS Bench Stock/Technical Order Monitor, Logistics Management, and Avionics Specialist.

Group Descriptions

The following paragraphs contain brief job descriptions of the clusters and independent job types identified through the career ladder structure analysis. Representative tasks for all clusters and independent job types are contained in Appendix A.

I. GENERAL EQUIPMENT REPAIR PERSONNEL CLUSTER (GRP064). The 90 airmen in this cluster represent the largest group in the survey (33 percent). Consisting primarily of 5-skill level (51 percent) and 7-skill level (48 percent) personnel, they devote 90 percent of their job time to duties and tasks involving the performance of technical functions. The cluster, as a whole, performs an average of 268 tasks (second highest of all groups identified). The high number of tasks and the difficulty of those tasks resulted in a JDI of 17.23 (second highest of any group in the survey sample. Typical tasks include:

- operationally checking AN/ARR-71 receiver systems
- replacing AN/ART-47 transmitter systems
- interpreting schematic diagrams for fault isolation
- tuning LF/VLF 20KW transmitters
- aligning APM systems

Sixty-seven percent of the cluster are on flying status, and accrue at least one hour, but less than 30 hours, flying time per month. A small percentage (17 percent) of individuals within this cluster, who are stationed at Offutt AFB, accrue 75 hours or more flying time each month. All flying personnel perform flightline maintenance hard alert at least one day or more per month. Aircraft models encompassed within this cluster are the E-4A, E-4B, EC-135A, EC-135C, EC-135G, EC-135H, EC-135J, EC-135L, and the EC-135P. Although all members do not maintain systems on every aircraft

model mentioned above, they do share the commonality of the EC-135C aircraft. Not all individuals within this particular cluster are on flying status, which creates some variation in job.

One such job variation contains individuals who spend most of their job time performing flightline and shop maintenance off-equipment work. They are not on flying status and differ from other General Equipment Repair Personnel because they spend a portion of their duty time (one percent or more but less than 10 percent) on hard alert performing ABNCP communications equipment systems in-shop maintenance. Typical tasks performed include:

- bench checking ID 1584/ARC-89 AGC level monitors
- isolating malfunctions in UHG-AM/FM receiver tuners
- off-equipment
- replacing AN/ARR-71 receiver GRU or components
- off-equipment
- bench checking AN/ART-47 synthesizers

Ninety-four percent of the personnel in the cluster reported their job was interesting (highest of survey sample), 93 percent indicated their training was utilized fairly well to perfectly, which, along with another group, was also the highest of all groups in the survey sample, and 92 percent felt their talents were properly utilized (second highest of all groups in survey sample). Seventy-seven reported positive reenlistment intentions, which was the highest percentage of all surveyed groups.

II. FLIGHTLINE AND SHOP MAINTENANCE PERSONNEL (GRP049). Composed of 24 SAC personnel, the majority (83 percent) hold DAFSC 32855. The group averages E-4 in grade, and represents nine percent of the survey sample. As previously mentioned, they do not perform hard alert, and they do not accrue any flying time per month, even though one individual is on flying status. Most of their job time is spent performing flightline and shop maintenance on a wide variety of instrument systems pertaining to the E-4A, E-4B, or EC-135C aircraft models. They perform an average of 299 tasks, highest of any group in the survey sample, and they have the highest Job Difficulty Index (18.57) of the sample. Roughly 105 of those tasks account for 50 percent of their job time. Typical tasks include:

- operationally checking AN/ACC-3 multiplex systems
- replacing AN/ASW-28 airborne launch control system power supply LRU
- aligning AN/ART-47 transmitter systems
- isolating malfunctions to AN/ART-47 transmitter systems
- researching manuals for part numbers

Seventy-nine percent of the personnel reported their job was interesting, which, along with another group, was next to the lowest rating of all groups in the survey sample. Ninety-two percent indicated their talents were

utilized fairly well to perfectly (second highest percentage of all survey groups) while 83 percent felt their training was utilized fairly well to perfectly (third lowest of all groups in the survey). Sixty-three percent (third highest of all survey groups) reported positive reenlistment intentions.

III. RECEIVER AND TRANSMITTER REPAIR PERSONNEL (GRP057). This independent job type group of seven airmen represents only 2 percent of the survey sample. Predominantly 5-skill level and 3-skill level personnel (57 percent and 29 percent, respectively), this group is among the lowest in experience (63 percent are in their first enlistment) with an average grade of 3.4 and 9 months in the career field. They perform 181 tasks, with the majority of their job time dedicated to maintaining receiver and transmitter systems. Typical tasks include:

- replacing AN/ART-47 transmitter system LRU
- operationally checking AN/ARR-71 receiver systems
- aligning AN/ART-42 transmitter systems
- calibrating specialized test equipment
- performing alert functions while on station

Personnel maintain the E-4A, E-4B, EC-135A, EC-135C, or EC-135G. Three individuals are on flying status, and four perform flightline (on-equipment) maintenance. Five members of the group spend three days or more each month on hard alert performing flightline maintenance; one person performs ABNCP communications equipment system in-shop maintenance on hard alert, one percent or more, but less than 10 percent of the time each month, and one individual performs no hard alert.

Six of the members (fourth highest of all survey groups) found their job interesting and perceived that their talents and training were being used effectively, while four members intend to reenlist, which is the third lowest of all groups in the survey.

IV. AFSATCOM PERSONNEL (GRP060). This group of 20 individuals is distinguished from other independent job types by the fact that 37 percent of their job time is spent maintaining satellite communications, specifically AFSATCOM, systems. They perform a relatively small average number of tasks (average 97); however, 50 percent of their job time is spent on 77 tasks. Typical tasks include:

- bench checking AFSATCOM control LRU
- replacing AFSATCOM high power amplifier LRU
- operationally checking AFSATCOM type 3A systems
- isolating malfunctions to AFSATCOM modem LRU
- bench checking AFSATCOM input/output (I/O) devices

AFSATCOM personnel average E-4 in grade, with 72 percent of their members in their first enlistment (highest of all groups in the survey sample). They average only 12 months in the career field and average 41 months in service, which is the lowest of any TAFMS group in the survey sample. None of the members are on flying status, and they do not perform hard alert. The group maintains the EC-135A, EC-135C, EC-135G, or EC-135H aircraft models systems and equipment.

Although 85 percent (third lowest of all surveyed groups) found the job interesting, and 90 percent (third highest of all surveyed groups) felt their training was being utilized fairly well to perfectly, only 70 percent (second lowest of all survey groups) were satisfied their talents were being utilized properly. Fifty percent of the personnel (second lowest of all surveyed groups) indicated positive reenlistment intentions, which is also the smallest percentage of any group in the survey sample.

V. RADIO REPAIR PERSONNEL CLUSTER (GRP041). This cluster of 42 airmen represents 15 percent of the survey sample. Comprised primarily of DAFSC 32855 personnel (74 percent), they devote 90 percent of their job time to duties and tasks involving the performance of technical functions, with 46 percent of that time related to maintaining UHF-AM/FM radio systems. Typical of the average 161 tasks performed are:

- bench checking AN/ARR-71 receivers
- isolating malfunctions in UHF-AM/FM receiver tuners
- off-equipment
- bench checking AN/ART-47 synthesizers
- operationally checking AN/ART-47 transmitter systems
- aligning AN/ARR-71 receiver systems

The cluster, as a whole, is composed of nonflying-status individuals. They perform maintenance functions on all models of the EC-135 aircraft. Two variations exist within this cluster. The first is a group of seven individuals stationed at Grissom AFB. Five of their members are on flying status and accrue 1 hour, but less than 30 hours flying time per month. All seven perform at least 6 days, but less than 9 days per month on hard alert. They perform maintenance only on the EC-135G and EC-135L aircraft models. Although the bulk of their job time is spent performing the same tasks as the cluster, they do not perform any maintenance on the AN/ART-42 transmitter nor the AN/ARR-68 receiver systems, which are only on the EC-135A model. The other job variation, on the other hand, maintain all versions of EC-135 except the EC-135J and the EC-135P aircraft models.

Eighty-eight percent of the personnel in the cluster reported their job was interesting and their talents were being utilized fairly well to perfectly (which is the second and third highest in the survey sample, respectively). Seventy-nine percent (second lowest of all groups identified) perceived that their training was being utilized adequately, while 57 percent (third lowest of all groups surveyed) expressed positive reenlistment intentions.

VI. ADMINISTRATIVE AND SUPERVISORY PERSONNEL (GRP035). The most senior group in the survey sample, these 15 experienced NCOs average 99 months in the service. With 87 percent holding the 7-skill level DAFSC, the group has the highest average grade (E-6) of any group identified. Seventy-four percent report supervising an average of 10 personnel, while 13 percent supervise more than 12 persons. Sixty-eight percent of their duty time is devoted to supervision, management, training, administration, and supply functions. Representative tasks of the 126 tasks performed by this group include:

- preparing APRs
- counseling trainees on training progress
- determining supply requirements
- conducting OJT
- implementing self-inspection programs

One individual in this group is on flying status and accrues 15 hours or more, but less than 30 hours, flying time each month. That individual spends 1 percent or more, but less than 10 percent, of duty time on hard alert performing ABNCP communications equipment system flightline (not in-shop) maintenance per month. All members of this group perform maintenance functions on the E-4A, E-4B, EC-135A, EC-135C, EC-135G, EC-135J, or the EC-135L aircraft models.

Eighty-seven percent of the respondents (fourth highest of all groups surveyed) reported their jobs were interesting, while 93 percent (highest of all surveyed groups) perceived their talents and training were utilized fairly well to perfectly. Sixty-seven percent (second highest of all groups in sample) indicated positive reenlistment intentions, which is to be expected since so many of the personnel are 7-levels.

VII. FORMAL TRAINING PERSONNEL (GRP053). This independent job type group of 17 individuals consists solely of 5-skill level (59 percent) and 7-skill level (41 percent) personnel. Although these members average five years in the career field, the job they perform is rather limited in scope. Seventy-two percent of their job time is devoted specifically to training, while only 1 percent of their job time is spent performing general, airborne, command post maintenance and maintenance analysis, or job control functions. They perform the least amount of average number of tasks (only 19) of any group in the sample survey. Typical tasks include:

- conducting resident course classroom training
- preparing lesson plans
- counseling trainees on training progress
- writing test questions
- developing training aids

The majority of the group members (59 percent) feel their talents and training are not being properly utilized, which is the lowest of all surveyed groups. Only 47 percent feel their job is interesting

Comparison of Specialty Jobs

Jobs within this specialty vary in terms of systems and models of aircraft maintained, number, and type of tasks performed, as well as other factors. To contrast these differences, several tables were developed which summarize information about specialty groups (see Tables 4, 5, and 6).

As illustrated by Table 4, members of the 328X5 career field forming these clusters and job types were distinguished by the type of systems or systems they primarily maintained. Of the systems involved, only two (general airborne command post system and UHF-AM/FM radio systems) were worked on by a substantial percentage of personnel from almost all job groups, with the exception of administrative and supervisory personnel and formal training personnel. Also, nearly all groups identified performed a number of common general maintenance and administrative functions, regardless of specialization. Administrative and supervisory and training personnel were also distinguished due to their performance of job-related functions.

The job difficulty for each of the major functional groups as estimated by the Job Difficulty Index (JDI) varies substantially, as can be seen in Table 5. For this specialty, the index ranges from a high of 18.57 for Flightline and Shop Maintenance Personnel, who perform an average of 299 tasks, to a low of 3.6 for Formal Training personnel, who perform an average of only 19 tasks.

The low JDI for Formal Training personnel is probably a function of the limited number of training tasks in the USAF Job Inventory and is not an accurate reflection of the true difficulty of the job. In this case, the low JDI can be interpreted more as a function of the high degree of specialization of the Formal Training job.

Expressed job interest was rated high overall, with only one group reflecting less than 50 percent of the group members reporting positive perceptions of interest in current job (see Table 6). Utilization of training and talents also rated high for members of the identified job groups, with only one group (Formal Training personnel) reflecting less than 60 percent of the group members perceiving positive utilization of training and talents. It should be noted that the Formal Training personnel perform a limited specialized job.

Reenlistment intent varied from a relatively high 77 percent for General Equipment Repair Personnel to a low of just 50 percent for AFSATCOM personnel.

Overall, job satisfaction for the groups identified in the career structure analysis generally was high. The group which indicated low job satisfaction indices included small numbers of incumbents who perform limited or specialized jobs.

TABLE 4

AVERAGE PERCENT TIME SPENT ON DUTIES BY CLUSTERS AND JOB TYPES

DUTIES	GENERAL EQUIP REPAIR PERSONNEL (GRP064, N=90)		FLIGHTLINE AND SHOP MAINT PERSONNEL (GRP049, N=24)		RECEIVER AND TRANSMITTER REPAIR PERSONNEL (GRP057, N=7)		AFSATCOM PERSONNEL (GRP060, N=20)		RADIO REPAIR PERSONNEL (GRP041, N=42)		ADMIN AND SUPERVISORY PERSONNEL (GRP035, N=15)		FORMAL TRAINING PERSONNEL (GRP053, N=17)	
A. ORGANIZING AND PLANNING	1		1		*		*		1		15		2	
B. DIRECTING AND IMPLEMENTING	1		1		*		*		2		13		3	
C. INSPECTING AND EVALUATING	2		1		*		*		1		18		2	
D. TRAINING	2		1		*		*		2		11		72	
E. MAKE ENTRIES ON FORMS OR RECORDS AND PERFORMING ADMINISTRATIVE, SECURITY, AND SUPPORT FUNCTIONS	4		3		6		4		4		11		16	
F. PERFORMING SUPPLY FUNCTIONS	2		3		2		3		4		9		2	
G. PERFORMING MAINTENANCE ANALYSIS OR JOB CONTROL FUNCTIONS	*		*		*		*		*		2		*	
H. PERFORMING GENERAL AIRCREW FUNCTIONS	4		*		7		*		1		*		*	
I. PERFORMING GENERAL AIRBORNE COMMAND POST MAINTENANCE FUNCTIONS	15		15		22		15		12		5		1	
J. MAINTAINING TELETYPE AND ANCILLARY AIRBORNE COMMAND POST SYSTEMS AND EQUIPMENT	5		*		2		3		*		*		*	
K. MAINTAINING INTERPHONE SYSTEMS	3		1		3		*		*		*		*	
L. MAINTAINING UHF-AM/FM RADIO SYSTEMS	12		17		22		5		45		6		*	
M. MAINTAINING MULTIPLEX SYSTEMS AND HYBRID SWITCHING SYSTEMS	6		7		14		2		6		2		*	
N. MAINTAINING SWITCHING SYSTEMS	4		3		2		*		1		*		*	
O. MAINTAINING AIRBORNE PERFORMANCE MONITOR (APM) SYSTEMS	4		5		8		*		7		2		*	
P. MAINTAINING PATCH AND TEST FACILITIES	2		*		1		*		*		*		*	
Q. MAINTAINING HIGH FREQUENCY (HF) RADIO AND VHF/UHF COMMAND RADIO SYSTEMS	3		*		2		*		*		*		*	
R. MAINTAINING LOW FREQUENCY/VERY LOW FREQUENCY (LF/VLF) RECEIVER TRANSMITTER SYSTEMS	8		6		3		12		*		*		*	
S. MAINTAINING SECURE DIGITAL DATA AND SECURE VOICE SYSTEMS	4		*		*		*							
T. MAINTAINING SATELLITE COMMUNICATIONS (SATCOM OR AFSATCOM) SYSTEMS	8		7		*		37		*		*		*	

TABLE 4 (CONTINUED)

AVERAGE PERCENT TIME SPENT ON DUTIES BY CLUSTERS AND JOB TYPES

DUTIES	GENERAL EQUIP REPAIR PERSONNEL (GRP064, N=90)		FLIGHTLINE AND SHOP MAINT PERSONNEL (GRP049, N=24)		RECEIVER AND TRANSMITTER REPAIR PERSONNEL (GRP057, N=7)		AFSATCOM PERSONNEL (GRP060, N=20)		RADIO REPAIR PERSONNEL (GRP041, N=42)		ADMIN AND SUPERVISORY PERSONNEL (GRP035, N=15)		FORMAL TRAINING PERSONNEL (GRP053, N=17)	
	*	*	*	*	*	*	*	*	*	*	*	*	*	*
U. MAINTAINING AUTOMATIC DATA PROCESSING SYSTEMS	*	*	*	*	*	*	*	*	*	*	*	*	*	*
V. MAINTAINING TAPE RECORDING SYSTEMS AND AN DROPOUT SYSTEMS	*	*	*	*	*	*	*	*	2	2	*	*	*	*
W. MAINTAINING AIRBORNE LAUNCH CONTROL SYSTEMS	6	6	17	17	2	2	*	*	*	*	*	*	*	*
X. MAINTAINING EVALUATION, ANALYSIS RECORDING SYSTEMS (EARS OR HARDS)	*	*	1	1	*	*	*	*	*	*	*	*	*	*
Y. MAINTAINING MISCELLANEOUS RADIO SYSTEMS	2	2	1	1	*	*	*	*	*	*	*	*	*	*
Z. MAINTAINING MOCKUPS, PECULIAR TEST EQUIPMENT AND COMMON TEST EQUIPMENT	2	2	5	5	2	2	13	13	7	7	2	2	*	*

* DENOTES LESS THAN ONE PERCENT

TABLE 5
SELECTED BACKGROUND DATA FOR CAREER LADDER CLUSTERS AND INDEPENDENT JOB TYPES

	GENERAL EQUIP REPAIR PERSONNEL GRP064	FLIGHTLINE AND SHOP MAINT PERSONNEL GRP049	RECEIVER AND TRANSMITTER REPAIR PERSONNEL GRP057	AFSATCOM PERSONNEL GRP060	RADIO REPAIR PERSONNEL GRP041	ADMIN AND SUPERVISORY PERSONNEL GRP035	FORMAL TRAINING PERSONNEL GRP053
NUMBER IN GROUP	90	24	7	20	42	15	17
PERCENT OF TOTAL SAMPLE	33%	9%	2%	7%	15%	5%	6%
PERCENT IN CONUS	88%	100%	100%	55%	67%	93%	100%
PERCENT OVERSEAS	12%	-%	-%	45%	33%	7%	-%

32835	2%	0%	29%	30%	12%	0%	0%
32855	48%	83%	57%	50%	74%	13%	59%
32875	58%	17%	14%	20%	12%	87%	41%
NOT COUNTED	2%	0%	0%	0%	0%	0%	0%

AVERAGE GRADE	4.9	4.1	3.4	3.9	3.7	6.3	5.0
AVERAGE MONTHS IN CAREER FIELD	23	13	9	12	18	99	60
AVERAGE MONTHS IN SERVICE	109	92	62	41	61	192	110

PERCENT IN FIRST ENLISTMENT	16%	33%	63%	72%	65%	0%	30%
PERCENT SUPERVISING	38%	29%	14%	30%	24%	87%	0%
AVERAGE NUMBER OF TASKS PERFORMED	268	299	181	97	161	126	19
JOB DIFFICULTY INDEX (JDI)	17.23	18.57	15.58	10.15	16.22	10.29	3.6
(AVERAGE JDI = 13.00)							

TABLE 6
COMPARISONS OF JOB SATISFACTION INDICATORS BY CAREER LADDER CLUSTERS AND INDEPENDENT JOB TYPES
(PERCENT MEMBERS RESPONDING)*

	GENERAL EQUIP REPAIR PERSONNEL (GRP064, N=90)	FLIGHTLINE AND SHOP MAINT PERSONNEL (GRP049, N=24)	RECEIVER AND TRANSMITTER REPAIR PERSONNEL (GRP057, N=7)	AFSATCOM PERSONNEL (GRP060, N=20)	RADIO REPAIR PERSONNEL (GRP041, N=42)	ADMIN AND SUPERVISORY PERSONNEL (GRP035, N=15)	FORMAL TRAINING PERSONNEL (GRP053, N=17)
<u>EXPRESSED JOB INTEREST</u>							
DULL	2	4	0	0	2	0	29
SO-SO	4	17	14	15	10	13	24
INTERESTING	94	79	86	85	88	87	47
<u>PERCEIVED UTILIZATION OF TALENTS</u>							
LITTLE OR NOT AT ALL	7	8	14	30	12	7	41
FAIRLY WELL TO PERFECTLY	93	92	86	70	88	93	59
<u>PERCEIVED UTILIZATION OF TRAINING</u>							
LITTLE OR NOT AT ALL	8	17	14	10	21	7	41
FAIRLY WELL TO PERFECTLY	92	83	86	90	79	93	59
<u>REENLISTMENT INTENTIONS</u>							
RETIRE	10	0	0	5	5	20	6
NO, PROBABLY NO	12	37	43	45	38	13	35
YES, PROBABLY YES	77	63	57	50	47	67	59

* COLUMNS MAY NOT ADD UP TO 100% DUE TO NO RESPONSE OR ROUNDING

ANALYSIS OF 328X5 DAFSC GROUPS

Data pertaining to DAFSC groups is important to the analysis of each career ladder. The distribution of 328X5 skill levels across career ladder job groups is displayed in Table 7, while Table 8 displays the relative percent time spent on each duty across the skill groups. As personnel progress upward through the skill levels, the amount of time spent performing supervisory, managerial, training, and administrative tasks (Duties A, B, C, D, and E) increases. On the other hand, tasks pertaining to general aircrew functions reflect decreases, while performance of general airborne command post maintenance functions also increases. Specific skill level groups are discussed below. Since a comparison of duty and task performance between DAFSCs 32835 and 32855 indicated no significant difference in the jobs they performed, they will be discussed as one group.

Skill Level Descriptions

DAFSCs 32835/32855. Representing 60 percent (165 members) of the 328X5 survey sample, 3-skill/5-skill level personnel performed an average of 150 tasks. Performing a highly technical job, members spent the largest percent of their time on duties involving general maintenance and maintenance on specific airborne command post systems. Performing administrative and supply functions accounted for only a small percentage of their duty time. Typical general maintenance tasks performed included:

- cleaning or treating filters
- performing phase, periodic, or isochronal inspections of ABNCP communications equipment
- performing preflight inspections of ABNCP communications systems

Common tasks relating to specific airborne command post systems maintenance were:

- bench checking AN/ART-47 synthesizers
- isolating malfunctions to LF/VLF 20KW transmitters
- aligning AN/ART-42 transmitter systems

Table 9 presents additional tasks performed by this group.

DAFSC 32875. The 106 personnel at the 7-skill level performed an average of 169 tasks, with 137 of those tasks accounting for over 50 percent of their job time. While still spending a significant amount of their total job time performing technical tasks (42 percent), supervisory, managerial, and

administrative type tasks became the dominant feature of the 7-skill level group's job. Table 10 presents representative tasks for this group and reflects the range of the job with 64 percent of the group preparing APRs, while 43 percent perform communications systems alignment (CSA) of ABNCP communications equipment.

Differences between the 3/5- and 7-skill level groups are reflected by the listing of tasks in Table 11. It is apparent that, while the 7-skill level airmen still perform technical tasks, the group members clearly have the greatest responsibility for supervision, management, and training in the career ladder.

Summary

Career ladder progression is well defined. Overall, the responsibilities of the 3- and 5-skill level incumbents are similar. Both groups spend the vast majority of their job time performing technical tasks. In comparison, the 7-skill level personnel perform predominantly supervisory, managerial, and administrative tasks.

TABLE 7

DISTRIBUTION OF 328X5 GROUP MEMBERS ACROSS
CAREER LADDER JOBS
(NUMBER OF MEMBERS RESPONDING)

<u>JOB GROUPS (CLUSTERS AND INDEPENDENT JOB TYPES)</u>	<u>DAFSC 32835</u>	<u>DAFSC 32855</u>	<u>DAFSC 32875</u>
GENERAL EQUIPMENT REPAIR PERSONNEL	2	43	52
FLIGHTLINE AND SHOP MAINTENANCE PERSONNEL	0	20	4
RECEIVER AND TRANSMITTER REPAIR PERSONNEL	7	4	1
AFSATCOM PERSONNEL	8	10	4
RADIO REPAIR PERSONNEL	3	31	5
ADMINISTRATIVE AND SUPERVISORY PERSONNEL	0	2	12
FORMAL TRAINING PERSONNEL	0	10	7
MEMBERS NOT GROUPED	6	19	21
TOTAL	(N=26)	(N=139)	(N=106)

TABLE 8

AVERAGE PERCENT TIME SPENT PERFORMING DUTIES BY 328X5 DAFSC GROUPS

DUTIES	DAFSC 32835 (N=26)	DAFSC 32855 (N=139)	DAFSC 32875 (N=106)
A. ORGANIZING AND PLANNING	*	1	6
B. DIRECTING AND IMPLEMENTING	*	1	6
C. INSPECTING AND EVALUATING	*	1	8
D. TRAINING	*	6	13
E. MAKE ENTRIES ON FORMS OR RECORDS AND PERFORMING ADMINISTRATIVE, SECURITY, AND SUPPORT FUNCTIONS			
F. PERFORMING SUPPLY FUNCTIONS	5	6	8
G. PERFORMING MAINTENANCE ANALYSIS OR JOB CONTROL FUNCTIONS	5	4	4
H. PERFORMING GENERAL AIRCREW FUNCTIONS	*	*	2
I. PERFORMING GENERAL AIRBORNE COMMAND POST MAINTENANCE	*	2	2
J. MAINTAINING TELETYPE AND ANCILLARY AIRBORNE COMMAND POST SYSTEMS AND EQUIPMENT	16	13	9
K. MAINTAINING INTERPHONE SYSTEMS	1	3	2
L. MAINTAINING UHF-AM/FM RADIO SYSTEMS	1	1	2
M. MAINTAINING MULTIPLEX SYSTEMS AND HYBRID SWITCHING SYSTEMS	26	21	8
N. MAINTAINING SWITCHING SYSTEMS	9	5	3
O. MAINTAINING AIRBORNE PERFORMANCE MONITOR (APM) SYSTEMS	2	2	2
P. MAINTAINING PATCH AND TEST FACILITIES	2	4	3
Q. MAINTAINING HIGH FREQUENCY (HF) RADIO AND VHF/UHF COMMAND RADIO SYSTEMS	*	*	*
R. MAINTAINING LOW FREQUENCY/VERY LOW FREQUENCY (LF/VLF) RECEIVER/TRANSMITTER SYSTEMS	*	1	1
S. MAINTAINING SECURE DIGITAL DATA AND SECURE VOICE SYSTEMS	5	6	4
T. MAINTAINING SATELLITE COMMUNICATIONS (SATCOM OR AFSATCOM) SYSTEMS	*	1	2
U. MAINTAINING AUTOMATIC DATA PROCESSING SYSTEMS	10	7	6
V. MAINTAINING TAPE RECORDING SYSTEMS AND AM DROPOUT SYSTEMS	*	*	*
W. MAINTAINING AIRBORNE LAUNCH CONTROL SYSTEMS	*	*	*
X. MAINTAINING EVALUATION, ANALYSIS RECORDING SYSTEMS (EARS OR HARDS)	4	5	3
Y. MAINTAINING MISCELLANEOUS RADIO SYSTEMS	*	*	*
Z. MAINTAINING MOCKUPS, PECULIAR TEST EQUIPMENT, AND COMMON TEST EQUIPMENT	*	*	*
	10	4	2

*DENOTES LESS THAN ONE PERCENT

TABLE 9

REPRESENTATIVE TASKS PERFORMED BY DAFSC 32835/32855 PERSONNEL

TASKS	PERCENT MEMBERS PERFORMING (N=165)
E156 MAKE ENTRIES ON AFTO FORMS 350 (REPARABLE ITEM PROCESSING TAG)	76
L381 OPERATIONALLY CHECK AN/ART-47 TRANSMITTER SYSTEMS	72
I271 REPLACE MINOR ELECTRICAL HARDWARE, SUCH AS LAMPS, SWITCHES, FUSES, OR CONNECTORS	71
F191 RESEARCH MICROFICHE FOR PART INFORMATION	70
L379 OPERATIONALLY CHECK AN/ARR-71 RECEIVER SYSTEMS	70
L373 ISOLATE MALFUNCTIONS TO AN/ART-47 TRANSMITTER SYSTEMS	68
F190 RESEARCH MANUALS FOR PART NUMBERS	67
L366 ALIGN AN/ART-47 TRANSMITTER SYSTEMS	67
L369 ISOLATE MALFUNCTIONS TO AN/ARR-71 RECEIVER SYSTEMS	66
L364 ALIGN AN/ARR-71 RECEIVER SYSTEMS	66
I227 INTERPRET SCHEMATIC DIAGRAMS FOR FAULT ISOLATION	66
L374 ISOLATE MALFUNCTIONS TO AN/ART-47 TRANSMITTER SYSTEM LRU	66
I272 REPLACE NONELECTRICAL HARDWARE, SUCH AS SCREWS, NUTS, EJECTORS, OR COVERS	65
L370 ISOLATE MALFUNCTIONS TO AN/ARR-71 RECEIVER SYSTEM LRU	65
L393 REPLACE AN/ART-47 TRANSMITTER SYSTEM LRU	64
I267 REPLACE ELCTRONIC EQUIPMENT PINS, CONNECTORS, WIRE WRAPS, OR PLUGS	64
L375 ISOLATE MALFUNCTIONS TO UHF-AM/FM C-3811/AR CONTROL BOXES	61
L385 REPLACE AN/ARR-71 RECEIVER SYSTEM LRU	61
L394 REPLACE UHF-AM/FM C-3811/AR CONTROL BOXES	60
I255 PERFORM PHASE, PERIODIC, OR ISOCHRONAL INSPECTIONS OF ABNCP COMMUNICATIONS EQUIPMENT	59
I249 PERFORM GENERAL CLEANING OF ABNCP COMMUNICATIONS EQUIPMENT	59
I228 INTERPRET VISUAL FAULT INDICATORS FOR FAULT ISOLATION	59
I226 REPLACE DISCRETE CIRCUIT COMPONENTS, SUCH AS TRANSISTORS, DIODES, OR RESISTORS	58
L396 REPLACE UHF-AM/FM RECEIVER TUNERS	55

AVERAGE NUMBER OF TASKS PERFORMED - 150

TABLE 10

REPRESENTATIVE TASKS PERFORMED BY DAFSC 32875 PERSONNEL

TASKS	PERCENT MEMBERS PERFORMING (N=106)
C89 PREPARE APRs	64
D107 DEMONSTRATE HOW TO LOCATE TECHNICAL INFORMATION INCLUDING MICROFICHE DATA	61
D106 COUNSEL TRAINEES ON TRAINING PROGRESS	56
F190 RESEARCH MANUALS FOR PART NUMBERS	56
D103 CONDUCT OJT	56
L222 INTERPRET AIRCRAFT WIRING DIAGRAMS FOR FAULT ISOLATION	56
I227 INTERPRET SCHEMATIC DIAGRAMS FOR FAULT ISOLATION	56
L373 ISOLATE MALFUNCTIONS TO AN/ART-47 TRANSMITTER SYSTEMS	56
A3 COORDINATE AIRBORNE COMMAND POST (ABNCP) COMMUNICATIONS EQUIPMENT MAINTENANCE WITH JOB CONTROL	55
L381 OPERATIONALLY CHECK AN/ART-47 TRANSMITTER SYSTEMS	55
L364 ALIGN AN/ARR-71 RECEIVER SYSTEMS	55
L379 OPERATIONALLY CHECK AN/ARR-71 RECEIVER SYSTEMS	54
L393 REPLACE AN/ART-47 TRANSMITTER SYSTEM LRU	54
I271 REPLACE MINOR ELECTRICAL HARDWARE, SUCH AS LAMPS, SWITCHES, FUSES, OR CONNECTORS	54
L370 ISOLATE MALFUNCTIONS TO AN/ARR-71 RECEIVER SYSTEM LRU	53
A19 PARTICIPATE IN MEETINGS, SUCH AS STAFF MEETINGS, BRIEFINGS, CONFERENCES, OR WORKSHOPS	53
A8 DETERMINE WORK PRIORITIES	53
B33 COUNSEL PERSONNEL ON PERSONAL OR MILITARY-RELATED MATTERS	50
E129 ESCORT VISITORS THROUGH FACILITIES	50
I277 VERIFY AIRBORNE PERFORMANCE MONITOR (APM) USING COMMUNICATIONS SYSTEMS ANALYZERS (CSA)	49
O518 ALIGN APM SYSTEMS	49
O524 OPERATIONALLY CHECK APM SYSTEM LRU	49
O519 ISOLATE MALFUNCTIONS IN APM SYSTEM LRU ON-EQUIPMENT	48
M453 ISOLATE MALFUNCTIONS TO AN/ACC-3 MULTIPLEX SYSTEMS	44
I245 PERFORM COMMUNICATIONS SYSTEMS ALIGNMENT (CSA) OF ABNCP COMMUNICATIONS EQUIPMENT	43

AVERAGE NUMBER OF TASKS PERFORMED - 169

TABLE 11

TASKS WHICH BEST DIFFERENTIATE BETWEEN 3-/5-SKILL AND 7-SKILL LEVEL PERSONNEL
(PERCENT MEMBERS PERFORMING)

TASKS	DAFSC 32835/55 (N=165)	DAFSC 32875 (N=106)	DIFFERENCE
I249 PERFORM GENERAL CLEANING OF ABNCP COMMUNICATIONS EQUIPMENT	59	34	+25
I256 PERFORM SELF-TEST PROCEDURES ON CARD TESTERS	32	8	+24
L403 BENCH CHECK AN/ARR-71 RECEIVERS	46	23	+23
L423 ISOLATE MALFUNCTIONS IN AN/ARR-71 RECEIVER SYSTEMS	39	17	+22
L416 BENCH CHECK C-3811/AR CONTROL	45	23	+22
L438 ISOLATE MALFUNCTIONS IN UHF-AM/FM RECEIVER TUNERS OFF-EQUIPMENT	39	17	+22
L424 ISOLATE MALFUNCTIONS IN AN/ARR-71 RECEIVER OFF-EQUIPMENT	42	21	+21
L437 ISOLATE MALFUNCTIONS IN C-3811/AR CONTROL BOXES OFF-EQUIPMENT	42	21	+21
L406 BENCH CHECK AN/ART-42 POWER SUPPLIES	23	2	+21
L410 BENCH CHECK AN/ART-47 IPA	42	21	+21
C89 PREPARE APRs	16	64	-48
A19 PARTICIPATE IN MEETINGS, SUCH AS STAFF MEETINGS, BRIEFINGS, CONFERENCES, OR WORKSHOPS	11	53	-42
D106 COUNSEL TRAINEES ON TRAINING PROGRESS	18	56	-38
B33 COUNSEL PERSONNEL ON PERSONAL OR MILITARY-RELATED MATTERS	13	50	-37
C94 REVIEW CORRESPONDENCE	5	41	-36
A30 SCHEDULE TEMPORARY DUTY, LEAVES, PASSES, OR ALERT DUTY	1	37	-36
E171 PREPARE SCHEDULES OR ROSTERS, SUCH AS SHIFT SCHEDULES OR RECALL ROSTERS	1	36	-35
D119 MAINTAIN TRAINING RECORDS, CHARTS, OR GRAPHS, OTHER THAN MMICS WORKCENTER LISTINGS	13	47	-34
C85 INDORSE AIRMAN PERFORMANCE REPORTS (APR)	1	33	-32
A8 DETERMINE WORK PRIORITIES	22	53	-31

AVERAGE NUMBER OF TASKS PERFORMED BY 32835/32855 PERSONNEL - 150

AVERAGE NUMBER OF TASKS PERFORMED BY 32875 PERSONNEL - 169

ANALYSIS OF AFR 39-1 SPECIALTY DESCRIPTIONS

The specialty descriptions for the Airborne Command Post Communications Equipment Technician and Airborne Command Post Equipment Specialist accurately reflect the combined technical and supervisory nature of the 7-skill level job and the technical nature of the 3-/5-skill level jobs.

ANALYSIS OF 328X5 TAFMS GROUPS

Utilization patterns for survey respondents in different Total Active Federal Military Service (TAFMS) groups were reviewed to determine if there were differences in tasks performed. As was true for 328X5 personnel, and as is typical in most career ladders, as time in service increased there was a corresponding increase in performance of duties involving supervisory, managerial, and training tasks (see Table 12). Time spent performing administrative, security, and support functions increased significantly as time in service increased. As time spent in supervisory and administrative duties increased, there was a corresponding decrease in the proportion of time spent on tasks in the technical maintenance functions.

First-Enlistment Personnel

First-enlistment personnel (1-48 months) spent most of their time maintaining UHF-AM/FM Radio Systems and performing general Airborne Command Post maintenance functions. Less than one percent of their job time involved supervisory performance, and only 4 percent of their job time consisted of training task performance. This reflects the highly technical nature of the first-term airmen's job. Representative tasks performed by this group are listed in Table 13, while Figure 2 displays the distribution of first-enlistment personnel across career ladder groups. Table 14 lists systems maintained by 15 percent or more of 328X5 first-term airmen, while Table 15 provides a display of electrical or electronic equipment used by more than 15 percent of first-enlistment group members.

Job Satisfaction Data

Table 16 provides data reflecting the job interest, perceived utilization of talents and training, and reenlistment intentions of selected TAFMS groups.

Comparison of the groups indicates that job satisfaction indicators are high, and that over 50 percent of 328X5 first-enlistment members have reenlistment intentions. Comparison of the second-enlistment group (49-96 months) shows a much higher increase in job interest and perceived utilization of talent and training, with a significant increase in reenlistment intent. Career group (97+ months) satisfaction indicators were slightly lower than the second-enlistment group, with the exception of a slight increase in perceived utilization of training. Reenlistment intention also reflected a decrease.

TABLE 12

RELATIVE TIME SPENT ON DUTIES BY 328X5 TAFMS GROUPS*

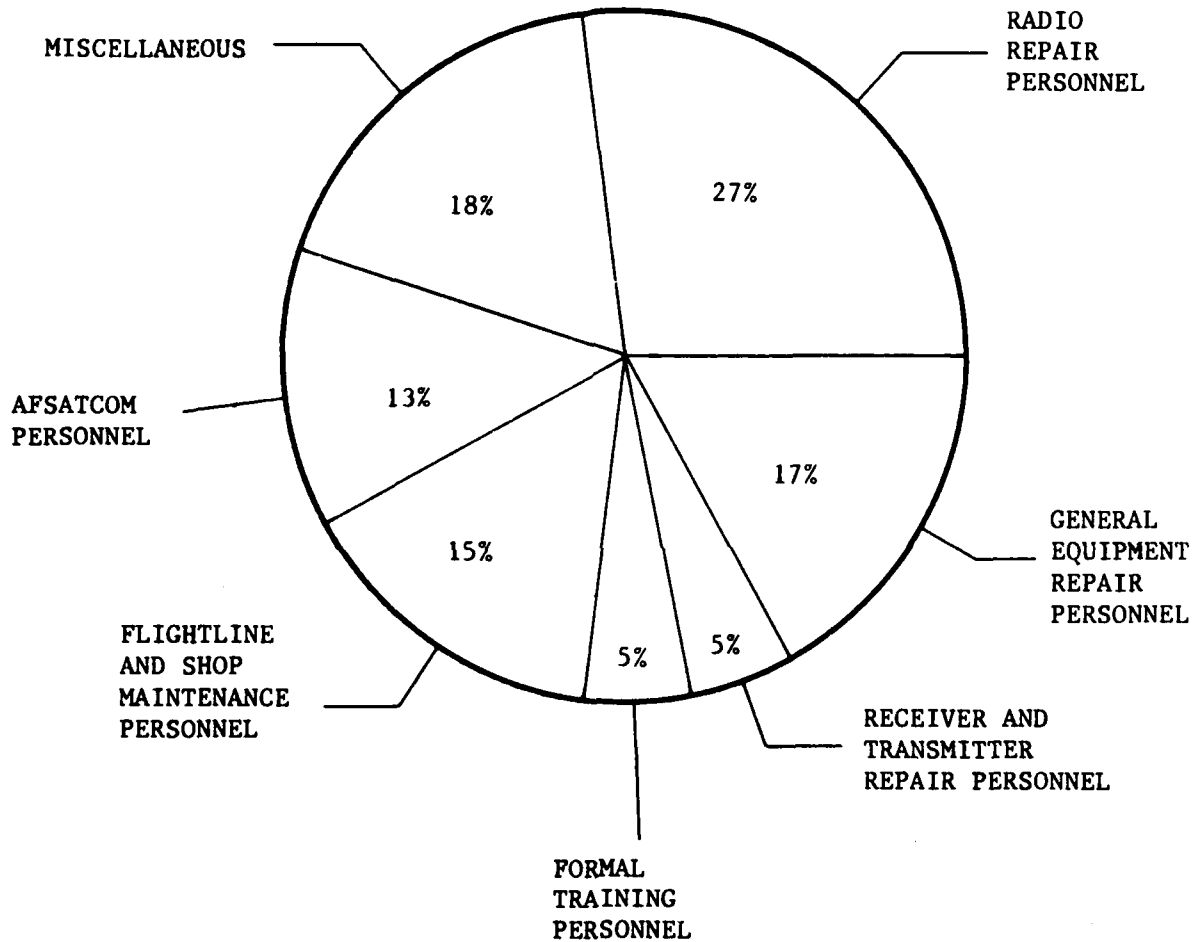
DUTIES	MONTHS TAFMS		
	1-48 (N=102)	49-96 (N=44)	97+ (N=128)
A. ORGANIZING AND PLANNING	**	1	5
B. DIRECTING AND IMPLEMENTING	**	1	6
C. INSPECTING AND EVALUATING	**	1	7
D. TRAINING	4	4	13
E. MAKING ENTRIES ON FORMS OR RECORDS AND PERFORMING ADMINISTRATIVE, SECURITY, AND SUPPORT FUNCTIONS	5	5	9
F. PERFORMING SUPPLY FUNCTIONS	4	4	4
G. PERFORMING MAINTENANCE ANALYSIS OR JOB CONTROL FUNCTIONS	**	**	2
H. PERFORMING GENERAL AIRCREW FUNCTIONS	1	2	2
I. PERFORMING GENERAL AIRBORNE COMMAND POST MAINTENANCE FUNCTIONS	15	13	9
J. MAINTAINING TELETYPE AND ANCILLARY AIRBORNE COMMAND POST SYSTEMS AND EQUIPMENT	2	4	2
K. MAINTAINING INTERPHONE SYSTEMS	1	2	2
L. MAINTAINING UHF-AM/FM RADIO SYSTEMS	25	17	9
M. MAINTAINING MULTIPLEX SYSTEMS AND HYBRID SWITCHING SYSTEMS	6	7	3
N. MAINTAINING SWITCHING SYSTEMS	2	4	2
O. MAINTAINING AIRBORNE PERFORMANCE MONITOR (APH) SYSTEMS	4	4	3
P. MAINTAINING PATCH AND TEST FACILITIES RADIO AND VHF/UHF COMMAND RADIO SYSTEMS	**	2	1
R. MAINTAINING LOW FREQUENCY/VERY LOW FREQUENCY (LF/VLF) RECEIVER/ TRANSMITTER SYSTEMS	6	6	4
S. MAINTAINING SECURE DIGITAL DATA AND SECURE VOICE SYSTEMS	**	2	2
T. MAINTAINING SATELLITE COMMUNICATIONS (SATCOM OR AFSATCOM) SYSTEMS	8	8	6
U. MAINTAINING AUTOMATIC DATA PROCESSING SYSTEMS	**	**	**
V. MAINTAINING TAPE RECORDING SYSTEMS AND AM DROPOUT SYSTEMS	**	**	**
W. MAINTAINING AIRBORNE LAUNCH CONTROL SYSTEMS	5	5	2
X. MAINTAINING EVALUATION, ANALYSIS RECORDING SYSTEMS (EARS OR HARDS)	**	**	**
Y. MAINTAINING MISCELLANEOUS RADIO SYSTEMS	**	2	**
Z. MAINTAINING MOCKUPS, PECULIAR TEST EQUIPMENT, AND COMMON TEST EQUIPMENT	6	3	3

* DOES NOT INCLUDE 32895 PERSONNEL

** INDICATES LESS THAN ONE PERCENT

FIGURE 2

DISTRIBUTION OF 328X5 FIRST-ENLISTMENT PERSONNEL ACROSS CAREER LADDER JOBS
(PERCENT MEMBERS RESPONDING)
(N=102)



(NOTE: ADMINISTRATIVE SUPERVISORY PERSONNEL - 0%)

TABLE 13

REPRESENTATIVE TASKS PERFORMED BY 328X5 FIRST-ENLISTMENT PERSONNEL
(1-48 MONTHS TAFMS)

TASKS	PERCENT MEMBERS PERFORMING (N=102)
E155 MAKE ENTRIES ON AFTO FORMS 349 (MAINTENANCE DATA COLLECTION RECORD)	75
F191 RESEARCH MICROFICHE FOR PART INFORMATION	74
F190 RESEARCH MANUALS FOR PART NUMBERS	67
I227 INTERPRET SCHEMATIC DIAGRAMS FOR FAULT ISOLATION	67
L366 ALIGN AN/ART-47 TRANSMITTER SYSTEMS	63
L393 REPLACE AN/ART-47 TRANSMITTER SYSTEM LRU	61
L385 REPLACE AN/ARR-71 RECEIVER SYSTEM LRU	58
I218 CLEAN OR TREAT FILTERS	58
L402 BENCH CHECK AN/ARR-71 RECEIVER SYSTEMS	51
L411 BENCH CHECK AN/ART-47 PENTHOUSES	48
O526 REPLACE APM SYSTEM LRU	47
L414 BENCH CHECK AN/ART-47 SYNTHESIZERS	
M446 ALIGN AN/ACC-3 MULTIPLEX SYSTEMS	46
O518 ALIGN APM SYSTEMS	45
O522 ISOLATE MALFUNCTIONS TO APM SYSTEMS	44
I274 REPLACE PLUG-IN ELECTRON TUBES	39
I265 REPLACE BATTERIES	37
I213 CALIBRATE SPECIALIZED TEST EQUIPMENT	32
I254 PERFORM PATCH PANEL OPERATIONS	29
O534 BENCH CHECK ID 1587/ARC-89 POWER	29
R595 TUNE LF/VLF 20KW TRANSMITTER	27
I237 LOAD PROGRAMS USING MAGNETIC TAPE	27
T681 REPLACE AFSATCOM CONTROL LRU	26
I236 LOAD PROGRAMS USING KEYBOARDS	23
I244 OPERATE POWERED AGE	22
T691 REPLACE AFSATCOM TYPE 3A SYSTEM LRU	21

AVERAGE NUMBER OF TASKS PERFORMED - 137

TABLE 14

ABNCP COMMUNICATIONS EQUIPMENT SYSTEMS USED BY MORE THAN 10 PERCENT
OF 328X5 FIRST-ENLISTMENT PERSONNEL
(1-48 MONTHS TAFMS)

ABNCP COMMUNICATIONS EQUIPMENT SYSTEMS	PERCENT MEMBERS PERFORMING (N=102)
AN/ARR-71, UHF RECEIVER SYSTEM	78
AN/ART-47, UHF HIGH POWER TRANSMITTER	78
AIRBORNE PERFORMANCE MONITOR (APM) SYSTEM	76
AN/ACC-3, MULTIPLEXER	70
AN/ARC-96, LF/VLF COMMUNICATIONS	68
AN/FRM-23, COMMUNICATIONS SYSTEMS ANALYZER	56
SB-2059A/ATC-1, AUTOMATIC SWITCHBOARD	49
AN/ASC-21(V)1, AFSATCOM TYPE 3	42
AN/ASQ-121, EVALUATION, ANALYSIS RECORDING SYSTEM (EARS) (HIGH ALTITUDE RADIATION DETECTION SYSTEM (HARDS))	42
AN/ART-42, UHF HIGH POWER TRANSMITTER	41
AN/AIC-18, INTERPHONE	39
AN/ASW-28, AIRBORNE LAUNCH CONTROL CENTER SYSTEM	35
AN/RR-68, UHF RECEIVER SYSTEM	35
HYBRID SWITCHING UNITS	32
VHF/FM RADIOTELEPHONE SYSTEM (MOTRAC)	32
AN/ACC-1, MULTIPLEXER	28
AN/ACC-6, MULTIPLEXER	28
RD-244/ARC-89(V), TAPE RECORDER SYSTEM	27
AM DROPOUT SYSTEM	26
CRYPTOGRAPHIC UNITS KG-33 OR KG-37	26
NO-BREAK POWER SUPPLY SYSTEM	25
AN/ARA-60, TELETYPE DATA SYSTEM	23
AN/AIC-23, PRIVATE INTERPHONE, AND ATC-1 (B/S ICS)	21
AN/ARC-34, UHF COMMAND RADIO SYSTEM	20
AN/AIC-10, INTERPHONE	20
AN/ARC-58, LIAISON/HF RADIO SYSTEM	18
DUAL 60 HZ CONVERTER	18
AN/ACC-2, MULTIPLEXER	17
AN/ARA-64, TACSATCOM	16
RE-544/ARC-89(V), OR RE-594/ARC-89(V) AND RE-593/ARC-89(V)	16
BROADCAST RECEIVER SYSTEM	16
BC RADIO SYSTEM	14
AN/ASC-21(V)1, AFSATCOM TYPE 12	12

TABLE 15

ELECTRICAL OR ELECTRONIC EQUIPMENT USED BY MORE THAN 15 PERCENT OF
328X5 FIRST-ENLISTMENT PERSONNEL
(1-48 MONTHS TAFMS)

ELECTRICAL OR ELECTRONIC EQUIPMENT USED	PERCENT MEMBERS PERFORMING (N=102)
FREQUENCY COUNTERS	96
MULTIMETERS	95
IMPEDANCE MATCHING DEVICES	95
POWER METERS (DUMMY LOADS) OR WATTMETERS	94
AUDIO OSCILLATORS	92
DIFFERENTIAL VOLTMETERS	92
DIGITAL VOLTMETERS OR MULTIMETERS	92
DIGITAL DATA ANALYZERS	90
LOGIC STATE ANALYZERS	90
FREQUENCY SELECTIVE VOLTMETERS	90
SOLDERING GUNS	90
RADIATION DETECTORS	88
DEVIATION METERS	86
ELECTRONIC COUNTERS	82
REGULATED POWER SUPPLY UNITS	79
SOLDERING GUNS	79
DISTORTION ANALYZERS	79
SAWTOOTH OR SQUARE WAVE GENERATORS	73
PAGE KITS	66
CURRENT METERS	64
PULSE GENERATORS	64
IMPEDANCE MATCHING DEVICES	50
SOLID-STATE DEVICE TESTERS	48
MODULATION METERS	47
POWER SUPPLY TESTERS	45
LOGIC PROBES	34
MEG-OHMMETERS	34
HIGH VOLTAGE PROBES	29
CURRENT PROBES OR GUNS	24
DIGITAL DATA ANALYZERS	28
LOGIC STATE ANALYZERS	23
CAPACITANCE TESTERS	22
TUBE TESTERS	20
SIGNALING TEST SETS	19

TABLE 16

JOB SATISFACTION INDICATORS BY 328X5 TAFMS GROUPS
(PERCENT MEMBERS RESPONDING)*

	1-48 MONTHS TAFMS		49-96 MONTHS TAFMS		97+ MONTHS TAFMS	
	328X0 (N=102)	COMPARATIVE SAMPLE** (N=1,600)	328X0 (N=44)	COMPARATIVE SAMPLE** (N=859)	328X0 (N=128)	COMPARATIVE SAMPLE** (N=1,435)
<u>EXPRESSED JOB INTEREST:</u>						
DULL	6	13	0	12	6	10
SO-SO	11	16	11	18	8	15
INTERESTING	83	69	89	69	86	73
<u>PERCEIVED UTILIZATION OF TALENT:</u>						
LITTLE OR NOT AT ALL	19	23	9	21	11	18
FAIRLY WELL TO PERFECTLY	82	71	91	71	89	67
<u>PERCEIVED UTILIZATION OF TRAINING:</u>						
LITTLE OR NOT AT ALL	21	21	14	23	11	24
FAIRLY WELL TO PERFECTLY	79	69	86	69	89	62
<u>REENLISTMENT INTENTIONS:</u>						
NO, WILL RETIRE	1	.2	0	.35	16	18
NO, OR PROBABLY NO	45	59	25	44	11	14
YES, OR PROBABLY YES	54	40	75	54	71	67

* MAY NOT TOTAL 100 PERCENT DUE TO NONRESPONSES

** COMPARATIVE SAMPLE OF MISSION EQUIPMENT MAINTENANCE CAREER LADDERS SURVEYED IN 1982 (INCLUDES 30XXX, 31XXX, 32XXX, 34XXX, 36XXX, 40XXX, 42XXX, 43XXX, 44XXX, AND 46XXX)

MAJCOM COMPARISONS

Tasks and background data for personnel of the five major commands (MAJCOM) with the largest 328X5 populations were compared to determine whether job content varied as a function of MAJCOM assignments.

Many of the basic general airborne command post maintenance tasks and procedures were performed in common by personnel in all commands (see Table 17 for a listing of selected common tasks). Generally, however, system-specific tasks performed and time spent on those tasks appeared to vary, based on the dominant types of aircraft maintained and the MAJCOM mission. Table 18 displays the time spent on various duty areas (types of systems), while Table 19 reflects specific selected tasks which indicate certain command job orientations. Notable major differences are discussed below.

Strategic Air Command (SAC)

SAC personnel were differentiated from other sample survey respondents by having spent more of their job time performing tasks relating to maintaining airborne launch control systems than any other command (see Table 19). Performance of tasks pertaining to maintaining evaluation, analysis recording systems (EARS or HARDs), and miscellaneous radio systems also helped to distinguish SAC personnel from other MAJCOM members.

Tactical Air Force (TAF) Components

Members of three commands flying primarily tactical fighter aircraft (TAC, USAFE, and PACAF), although displaying some task differences (see Table 19), displayed many similarities and are discussed as a common group. All three commands devoted slightly more duty time maintaining low frequency/very low frequency (LF/VLF) receiver/transmitter systems than the other two commands. Typical tasks for this aspect of their job included bench checking, isolating malfunctions, and replacing LF/VLF ARC-96 receiver system LRU, LF/VLF 20KW transmitter LRU, LF/VLF 616A cryptographic units, and 616A receiver system LRU. This group is also distinguished from other MAJCOM groups by their greater degree of involvement in maintaining satellite communications (SATCOM or AFSATCOM) systems.

Air Training Command (ATC)

ATC airmen are distinguished from the other MAJCOMs by the greater amount of duty time spent on training and the percentage of personnel performing tasks related to the administrative, security, and support functions, rather than directly involved with aircraft systems maintenance (see Table 18).

Summary

There were differences noted in the jobs performed by personnel across the MAJCOMs. These differences revolve around the unique systems found on MAJCOM-specific aircraft. While there are differences tied to the unique instrument systems, the vast majority of 328X5 personnel perform a job that is very similar with respect to the common systems maintained. Typical of these systems are the AN/AIC-18, AN/APX-64, the AN/ARR-71, and the Airborne Performance Monitor (APM) System, to name a few.

TABLE 17

EXAMPLES OF COMMON TECHNICAL TASKS PERFORMED ACROSS 328X5 MAJCOM GROUPS
(PERCENT MEMBERS PERFORMING)

TASKS	SAC (N=162)	TAC (N=26)	USAFE (N=38)	PACAF (N=12)	ATC (N=33)
F185 MAKE ENTRIES ON DD FORMS 1348 SERIES (DOD SINGLE LINE ITEM REQUISITION SYSTEM DOCUMENT)	23	23	21	33	21
I263 REPAIR DAMAGED AREAS OF CIRCUIT CARDS	41	42	45	33	3
I213 CALIBRATE SPECIALIZED TEST EQUIPMENT	48	35	32	42	9
I271 REPLACE MINOR ELECTRICAL HARDWARE, SUCH AS LAMPS, SWITCHES, FUSES, OR CONNECTORS	75	73	74	67	6
K357 ISOLATE MALFUNCTIONS IN PRIVATE INTERPHONE SYSTEM LRU OFF-EQUIPMENT	3	4	5	8	3
L395 REPLACE UHF-AM/FM RADIO SYSTEM DEFECTIVE WIRING	49	46	42	58	3
L402 BENCH CHECK AN/ARR-71 RECEIVER SYSTEMS	34	42	47	42	9
L423 ISOLATE MALFUNCTIONS IN AN/ARR-71 RECEIVER SYSTEMS OFF-EQUIPMENT	30	38	47	42	9
L432 ISOLATE MALFUNCTIONS IN AN/ART-47 PENTHOUSES OFF- EQUIPMENT	31	38	47	33	9
T656 ISOLATE MALFUNCTIONS TO AFSATCOM ROLM MESSAGE PROCESSING UNIT LRU	25	35	37	42	3
T673 OPERATIONALLY CHECK AFSATCOM ROLM MESSAGE PROCESSING UNIT LRU	21	27	34	33	3

TABLE 18

PERCENTAGE OF TIME SPENT ON DUTIES BY 328X5 MAJCOM GROUPS

DUTIES	SAC (N=162)	TAC (N=38)	USAF (N=33)	PACAF (N=26)	ATC (N=12)
A. ORGANIZING AND PLANNING	2	1	5	1	3
B. DIRECTING AND IMPLEMENTING	3	2	5	3	3
C. INSPECTING AND EVALUATING	4	2	7	2	3
D. TRAINING	2	1	1	1	53
E. MAKING ENTRIES ON FORMS OR RECORDS AND PERFORMING ADMINISTRATIVE, SECURITY, AND SUPPORT FUNCTIONS	6	6	13	5	7
F. PERFORMING SUPPLY FUNCTIONS	4	5	3	3	6
G. PERFORMING MAINTENANCE ANALYSIS OR JOB CONTROL FUNCTIONS	2	*	*	*	1
H. PERFORMING GENERAL AIRCREW FUNCTIONS	2	*	*	2	2
I. PERFORMING GENERAL AIRBORNE COMMAND POST MAINTENANCE FUNCTIONS	13	14	1	14	10
J. MAINTAINING TELETYPE AND ANCILLARY AIRBORNE COMMAND POST SYSTEMS AND EQUIPMENT	2	3	*	5	2
K. MAINTAINING INTERPHONE SYSTEMS	2	1	*	1	1
L. MAINTAINING UHF-AM/FM RADIO SYSTEMS	17	26	3	15	22
M. MAINTAINING MULTIPLEX SYSTEMS AND HYBRID SWITCHING SYSTEMS	6	2	2	6	2
N. MAINTAINING SWITCHING SYSTEMS	3	1	*	2	*
O. MAINTAINING AIRBORNE PERFORMANCE MONITOR (APM) SYSTEMS	4	4	*	4	4
P. MAINTAINING PATCH AND TEST FACILITIES	1	*	*	2	*
Q. MAINTAINING HIGH FREQUENCY (HF) RADIO AND VHF/UHF	1	*	*	1	3
R. MAINTAINING LOW FREQUENCY/VERY LOW FREQUENCY (LF/VLF) RECEIVER/TRANSMITTER SYSTEMS	4	7	2	11	9
S. MAINTAINING SECURE DIGITAL DATA AND SECURE VOICE SYSTEMS	1	*	*	5	3
T. MAINTAINING SATELLITE COMMUNICATIONS (SATCOM OR AFSATCOM)	*	14	2	11	7
U. MAINTAINING AUTOMATIC DATA PROCESSING SYSTEMS	*	*	*	*	*
V. MAINTAINING TAPE RECORDING SYSTEMS AND AM DROPOUT SYSTEMS	*	*	*	*	*
W. MAINTAINING AIRBORNE LAUNCH CONTROL SYSTEMS	6	*	*	*	*
X. MAINTAINING EVALUATION, ANALYSIS RECORDING SYSTEMS (EARS OR HARDS)	*	*	*	*	*
Y. MAINTAINING MISCELLANEOUS RADIO SYSTEMS	1	*	*	*	*
Z. MAINTAINING MOCKUPS, PECULIAR TEST EQUIPMENT, AND COMMON TEST EQUIPMENT	4	7	2	4	4

* DENOTES LESS THAN 1 PERCENT

TABLE 19

REPRESENTATIVE TASKS DISPLAYING DIFFERENCES BETWEEN 328X5 MAJCOM GROUPS
(PERCENT MEMBERS PERFORMING)

TASKS	SAC (N=162)	TAC (N=26)	USAF (N=38)	PACAF (N=12)	ATC (N=33)
W769 REPLACE AN/ASW-28 AIRBORNE LAUNCH CONTROL SYSTEM CODE HOLDING POWER SUPPLY LRU	41	0	0	0	0
W758 OPERATIONALLY CHECK AN/ASW-28 AIRBORNE LAUNCH	40	0	0	0	0
Y837 REPLACE VHF RADIOTELEPHONE (MOTRAC) UNITS	39	0	0	0	0
Y824 ISOLATE MALFUNCTIONS TO VHF RADIOTELEPHONE (MOTRAC) SYSTEMS	36	0	0	0	0
V829 OPERATIONALLY CHECK BROADCAST RECEIVER SYSTEMS	27	0	0	0	0
R583 OPERATIONALLY CHECK LF/VLF ARC-96 RECEIVE SYSTEMS	45	85	37	67	12
R594 REPLACE LF/VLF 616A RECEIVE SYSTEM LRU	44	77	45	58	12
R595 TUNE LF/VLF 20KW TRANSMITTERS	45	73	32	50	6
S617 ISOLATE MALFUNCTIONS TO AFA-64 SATCOM SYSTEM LRU	17	62	0	50	0
S625 OPERATIONALLY CHECK ARA-60 SECURE DIGITAL DATA SYSTEMS	20	54	21	42	0
L431 ISOLATE MALFUNCTIONS IN AN/ART-47 IPA OFF-EQUIPMENT	29	38	53	25	12
L427 ISOLATE MALFUNCTIONS IN AN/ART-42 POWER SUPPLIES OFF-EQUIPMENT	10	4	47	42	0
T699 BENCH CHECK AFSATCOM CONTROL LRU	11	15	42	25	9
T709 ISOLATE MALFUNCTIONS IN AFSATCOM HIGH POWER AMPLIFIER LRU OFF-EQUIPMENT	9	15	37	25	6
Z888 REPLACE AFSATCOM MAINTENANCE BENCH TEST SET SRU OR COMPONENTS	4	23	34	8	6
Q561 ISOLATE MALFUNCTIONS TO HF RADIO SYSTEMS	35	35	8	83	0
Q560 ISOLATE MALFUNCTIONS TO HF RADIO SYSTEMS LRU	33	35	8	75	0
Q570 REPLACE HF RADIO SYSTEM LRU	30	31	5	67	0
Q566 OPERATIONALLY CHECK HF RADIO SYSTEMS	33	27	3	58	0
Q558 ISOLATE MALFUNCTIONS TO AN/ARC-34 UHF COMMAND RADIO SYSTEMS	20	23	8	50	0
D124 WRITE TEST QUESTIONS	6	4	3	17	76
D121 PREPARE LESSON PLANS	10	4	0	17	76
B33 COUNSEL PERSONNEL ON PERSONAL OR MILITARY-RELATED MATTERS	25	19	8	33	64
D111 DEVELOP TRAINING AIDS	6	4	0	17	61
C94 REVIEW CORRESPONDENCE	21	15	5	17	24

ANALYSIS OF 32855 CONUS VERSUS OVERSEAS GROUPS

Comparisons were made of the tasks performed and background data for the 107 DAFSC 32855 personnel assigned to the continental United States (CONUS) versus the 32 members assigned to overseas locations. CONUS members performed an average of 162 tasks, with 140 tasks requiring over 50 percent of their job time. Overseas personnel, on the other hand, performed a job that was not as broad in scope, with an average of 148 tasks performed.

Although many systems were maintained by both groups, a larger percentage of the jobs performed differed, depending upon the MAJCOM mission and the aircraft model assigned (see Table 22). The most notable differences between the groups were a greater involvement by CONUS personnel pertaining to maintaining the AN/ACC-3 multiplex system, and a higher percentage of overseas personnel's job time devoted to the AN/ACC-6 multiplex system and the AN/ART-42, UHF high power transmitter. Table 20 lists tasks which best differentiate between the two groups. Tasks pertaining to the airborne launch control systems were not listed as a notable difference because they are a unique SAC function.

Comparisons of background data revealed that overseas personnel averaged slightly more time in the career field (36 months versus 31 months for CONUS); time in service was equal (58 months TAFMS). Common job satisfaction indicators of job interest and perceived utilization of talent and training were almost identical. Finally, 63 percent of the overseas respondents indicated plans to reenlist, while 60 percent of the CONUS personnel report intentions to remain in the Air Force.

TABLE 20

TASKS WHICH BEST DIFFERENTIATE BETWEEN DAFSC 32855 CONUS
AND OVERSEAS PERSONNEL
(PERCENT MEMBERS PERFORMING)

TASKS	CONUS (N=107)	OVERSEAS (N=32)	DIFFERENCE
M446 ALIGN AN/ACC-3 MULTIPLEX SYSTEMS	63	6	+57
M453 ISOLATE MALFUNCTIONS TO AN/ACC-3 MULTIPLEX SYSTEMS	63	6	+57
M466 OPERATIONALLY CHECK AN/ACC-3 MULTIPLEX SYSTEM LRU	59	3	+56
M460 OPERATIONALLY CHECK AN/ACC-3 MULTIPLEX SYSTEMS	62	6	+56
M454 ISOLATE MALFUNCTIONS TO AN/ACC-3 MULTIPLEX SYSTEM LRU	60	6	+54
M467 REPLACE AN/ACC-3 MULTIPLEX SYSTEM SRU OR COMPONENTS ON-EQUIPMENT	45	6	+39
M447 ALIGN AN/ACC-6 MULTIPLEX SYSTEMS	10	66	-56
L406 BENCH CHECK AN/ART-42 POWER SUPPLIES	11	62	-51
L409 BENCH CHECK AN/ART-42 TRANSMITTER SYSTEMS	12	59	-47
L408 BENCH CHECK AN/ART-42 TRANSMITTER CASES	11	56	-45
L407 BENCH CHECK AN/ART-42 SYNTHESIZERS	11	56	-45
M468 REPLACE AN/ACC-6 MULTIPLEX SYSTEM LRU	11	50	-39

AVERAGE NUMBER OF TASKS PERFORMED BY 32855 CONUS PERSONNEL - 162

AVERAGE NUMBER OF TASKS PERFORMED BY 32855 OVERSEAS PERSONNEL - 148

TABLE 21

COMPARISON OF SYSTEMS MAINTAINED BY 15 PERCENT OR MORE
DAFSC 32855 CONUS AND OVERSEAS PERSONNEL
(PERCENT MEMBERS PERFORMING)

SYSTEMS MAINTAINED	CONUS MEMBERS (N=107)	OVERSEAS MEMBERS (N=32)
ADP COMPUTER SYSTEM	15	0
AIRBORNE PERFORMANCE MONITOR (APM) SYSTEM	76	31
AM DROPOUT SYSTEM	36	6
AN/ACC-1, MULTIPLEXER	28	3
AN/ACC-2, MULTIPLEXER	16	3
AN/ACC-3, MULTIPLEXER	79	28
AN/ACC-6, MULTIPLEXER	14	81
AN/AIC-10, INTERPHONE	23	28
AN/AIC-18, INTERPHONE	57	41
AN/AIC-23, PRIVATE INTERPHONE	40	6
AN/ARA-64, TACSATCOM	29	28
AN/ARC-34, UHF COMMAND RADIO SYSTEM	24	28
AN/ARC-58, LAISON/HF RADIO SYSTEM	37	31
AN/ARC-96, LF/VLF COMMUNICATIONS	77	63
AN/ARC-186, VHF COMMAND RADIO SYSTEM	3	16
AN/ASC-21(V)1, AFSATCOM TYPE 3	48	59
AN/ASQ-121, EARS AND HARDS	53	3
AN/ASW-28, AIRBORNE LAUNCH CONTROL CENTER SYSTEM	46	3
AN/ARA-60, TELETYPE DATA SYSTEM	32	44
AN/ARR-68, UHF RECEIVER SYSTEM	22	69
AN/ARR-71, UHF RECEIVER SYSTEM	79	84
AN/ART-42, UHF HIGH POWER TRANSMITTER	28	72
AN/ART-47, UHF HIGH POWER TRANSMITTER	79	84
AN/FRM-23, COMMUNICATIONS SYSTEMS ANALYZER	54	66
BC RADIO SYSTEM	26	3
BROADCAST RECEIVER SYSTEM	28	0
CRYPTOGRAPHIC UNIT KW-7	22	28
CRYPTOGRAPHIC UNITS KG-33 OR KG-37	41	44
DUAL 60 HZ CONVERTER	27	31
HYBRID SWITCHING UNITS	35	9
KY-3A, SECURE VOICE SYSTEM	20	13
NO-BREAK POWER SUPPLY SYSTEM	38	44
RD-244/ARC-89(V), TAPE RECORDER SYSTEM	29	3
RE-544/ARC-89(V), OR RE-594/ARC-89(V) AND RE-593/ARC-89(V)	16	41
SB-1366/ARC-89, MANUAL SWITCHBOARD	25	69
SB-2870/ATC-1, AUTOMATIC SWITCHBOARD	15	3
SEMI-AUTOMATIC TELEPHONE SWITCHING SYSTEM (E-4)	18	3
VHF/FM RADIOTELEPHONE SYSTEM (MOTRAC)	50	3

TABLE 22

CONUS VS OVERSEAS MAJCOM DIFFERENCES REGARDING MISSION AND TYPES OF AIRCRAFT ASSIGNED*

MAJCOM	MISSION	TYPE OF AIRCRAFT ASSIGNED
SAC	<p>Project "Cover All" is the program designator for the SAC segment of the WABNCP system. The "Cover All" mission is to support the Commander-In-Chief SAC (CINCSAC). The SAC system is more commonly referred to as the Post Attack Command and Control System (PACCS).</p> <p>PACCS aircraft provide the following functions:</p> <ul style="list-style-type: none"> a. Primary SAC ABNCP b. Auxiliary ABNCP (AUXCP) c. Airborne Launch Control Center (ALCC) d. Airborne Radio Relay 	<p>EC-135A, EC-135C, EC-135G, EC-135L, E-4A and E-4B</p>
TAC	<p>The aircraft and mission assigned to TAC, designated as "Scope Light", is to provide support for Commander-In-Chief Atlantic (CINCLANT). One "Scope Light" aircraft is on continuous ground alert and available for directed airborne operations.</p>	<p>EC-135C, EC-135H, EC-135P</p>
USAFE	<p>The aircraft assigned to USAFE are designated as "Silk Purse". Their mission is to provide support to the Commander-In-Chief Europe (CINCEUR). One "Silk Purse" aircraft is on continuous alert and available for directed airborne operations</p>	<p>EC-135H</p>
PACAF	<p>The primary mission of the PACAF aircraft, designated as "Blue Eagle", is to provide support to the Commander-In-Chief Pacific (CINCPAC). One "Blue Eagle" aircraft is on continuous ground alert and available for directed airborne operations.</p>	<p>EC-135J</p>

* ATC's MAIN MISSION IS FORMAL TRAINING.

TRAINING ANALYSIS

Technical school personnel for the 328X5 career ladder, from the Keesler Technical Training Center, Keesler AFB, Mississippi, matched inventory tasks to appropriate sections of the STS and POI for Course 3ABR32835-000. It was this matching upon which the comparisons of data to training documents were based. A complete computer listing reflecting the percent members performing, training emphasis ratings, and task difficulty ratings for each task statement, along with STS and POI matching, has been forwarded to the technical school for their use in any further detailed review of training documents. A summary of that information is described below.

Training Emphasis

Training emphasis ratings were collected from 29 experienced career ladder NCOs who worked in a variety of commands and locations. These NCOs rated job inventory tasks on a 10-point scale ranging from zero (no training required) to 9 (extremely heavy training recommended). Raters had high agreement as to which tasks require some form of structured training during the first enlistment. In this career ladder the average training emphasis rating was 2.47, with a standard deviation of 1.51. Tasks rated above 3.98 are high in training emphasis and should be considered for technical school training. Tasks rated below average generally are not trained in formal technical schools. In deciding whether to include tasks in training, consider the fact that training emphasis ratings capture elements of task criticality, as well as percent of first-termers performing and the relative difficulty of tasks.

Table 23 lists the top 25 tasks the raters indicated as requiring the highest training emphasis. These tasks dealt with various instrument systems and general maintenance procedures, and were performed by a majority of first-enlistment personnel. Those tasks performed by 328X5 personnel which were rated among the lowest in training emphasis are listed in Table 24. Very low percentages of sample personnel perform these tasks, thus indicating that such tasks normally would not be included in a formal training program. (For a more complete description of these ratings, see the section on Task Factor Administration in the INTRODUCTION.)

Specialty Training Standard (STS)

A comprehensive review of STS 328X5, dated March 1979, was made comparing STS items to survey data. The STS generally provides comprehensive coverage of jobs performed by personnel in the field, with survey data supporting significant paragraphs or subparagraphs. Only one possibly significant task with high percentages of members performing, coupled with a high training emphasis rating, was not matched to specific STS references (see Table 25). Computer printouts reflecting the match between STS items and survey sample data have been furnished to the technical school for further detailed review.

Plan of Instruction (POI)

Based on the previously mentioned assistance from technical school subject-matter specialists in matching inventory tasks to the 3ABR32835-000 POI, dated 12 November 1981, a computer product was generated displaying the results of that matching process. Information furnished for consideration includes training emphasis (TE) and task difficulty (TD) ratings, as well as percent members performing data for first-job (1-24 months TAFMS), and first-enlistment (1-48 months TAFMS) personnel.

Almost all POI blocks and objectives are strongly supported by survey data based on percentages of first-term personnel performing tasks, or the high training emphasis or task difficulty ratings calculated for those tasks. There are paragraphs in Blocks VII, XII, and XV that are not supported, however (see Table 26). All of the tasks identified have less than 30 percent of the sample population performing, and the majority do not reflect high training emphasis ratings (3.98 or higher) or above average task difficulty. It is recommended they be reviewed for possible deletion, or should be specifically justified as a prerequisite knowledge area.

All apparently significant tasks with high training emphasis ratings and above average task difficulty ratings, with 30 percent or more first-job or first-enlistment personnel performing, were matched to appropriate POI blocks reflecting an overall well-developed training program for the 328X5 career ladder.

TABLE 23

TASKS RATED HIGHEST IN TRAINING EMPHASIS FOR 328X5 PERSONNEL

TASKS	TRAINING EMPHASIS	TASK DIFFICULTY	PERCENT MEMBERS PERFORMING	
			FIRST ENLISTMENT (N=102)	TOTAL SAMPLE 328X5 (N=274)
E155 MAKE ENTRIES ON AFTO FORMS 349 (MAINTENANCE DATA COLLECTION RECORD)	6.70	4.05	76	73
E156 MAKE ENTRIES ON AFTO FORMS 350 (REPARABLE ITEM PROCESSING TAG)	6.60	3.78	77	72
E157 MAKE ENTRIES ON AFTO FORMS 781 SERIES (AEROSPACE VEHICLE DOCUMENT SERIES)	6.53	3.67	46	57
I227 INTERPRET SCHEMATIC DIAGRAMS FOR FAULT ISOLATION	6.13	6.60	67	62
L410 BENCH CHECK AN/ART-47 IPA	6.00	6.03	50	34
L366 ALIGN AN/ART-47 TRANSMITTER SYSTEMS	5.87	5.87	63	62
L414 BENCH CHECK AN/ART-47 SYNTHESIZERS	5.87	5.93	47	34
I223 INTERPRET BLOCK DIAGRAMS FOR FAULT ISOLATION	5.80	5.83	66	64
I222 INTERPRET AIRCRAFT WIRING DIAGRAMS FOR FAULT ISOLATION	5.77	6.43	51	56
I245 PERFORM COMMUNICATIONS SYSTEMS ALIGNMENT (CSA) OF ABNCP COMMUNICATIONS EQUIPMENT	5.73	6.62	63	54
L417 BENCH CHECK UHF-AH/FM RECEIVER TUNERS	5.73	5.31	39	36
L403 BENCH CHECK AN/ARR-71 RECEIVER TUNERS	5.70	5.99	54	38
L370 ISOLATE MALFUNCTION TO AN/ARR-71 RECEIVER SYSTEM LRU	5.67	5.41	61	61
L412 BENCH CHECK AN/ART-47 POWER AMPLIFIERS	5.67	6.04	47	33
F191 RESEARCH MICROFICHE FOR PART INFORMATION	5.63	4.11	75	66
L364 ALIGN AN/ARR-71 RECEIVER SYSTEMS	5.63	5.68	61	62
L374 ISOLATE MALFUNCTIONS TO AN/ART-47 TRANSMITTER SYSTEM LRU	5.63	5.13	62	62
L431 ISOLATE MALFUNCTIONS IN AN/ART-47 IPA OFF-EQUIPMENT	5.63	6.30	44	31
L373 ISOLATE MALFUNCTIONS TO AN/ART-47 TRANSMITTER SYSTEMS	5.57	4.77	64	64
L381 OPERATIONALLY CHECK AN/ART-47 TRANSMITTER SYSTEMS	5.57	4.45	72	65
L433 ISOLATE MALFUNCTIONS IN AN/ART-47 POWER AMPLIFIERS OFF-EQUIPMENT	5.57	6.61	45	30
L369 ISOLATE MALFUNCTIONS TO AN/ARR-71 RECEIVER SYSTEMS	5.50	5.16	62	64
L379 OPERATIONALLY CHECK AN/ARR-71 RECEIVER SYSTEMS	5.50	4.50	68	35
L413 BENCH CHECK AN/ART-47 POWER SUPPLIES	5.50	5.17	50	44
L405 BENCH CHECK AN/ART-47 TRANSMITTER SYSTEMS	5.50	5.97	46	32

TABLE 24

TASKS RATED AMONG THE LOWEST IN TRAINING EMPHASIS FOR 328X5 PERSONNEL

TASKS	TRAINING EMPHASIS	TASK DIFFICULTY	PERCENT MEMBERS PERFORMING	
			FIRST ENLISTMENT (N=102)	TOTAL SAMPLE 328X5 (N=274)
Q568 REPLACE AN/ARA-50 AUTOMATIC DIRECTION FINDER LRU	.50	4.68	1	2
V743 ISOLATE MALFUNCTIONS IN RD-248 RECORDING SYSTEM LRU OFF-EQUIPMENT	.50	5.92	1	1
V813 ALIGN NATIONWIDE RADIO SYSTEMS	.50	5.71	1	4
A19 PARTICIPATE IN MEETINGS, SUCH AS STAFF MEETINGS, BRIEFINGS, CONFERENCES, OR WORKSHOPS	.47	4.33	9	27
C88 PERFORM MAINTENANCE STANDARDIZATION PROGRAM INSPECTIONS	.47	4.73	2	7
C75 EVALUATE MAINTENANCE OF PUBLICATION LIBRARIES	.43	4.09	1	5
D104 CONDUCT RESIDENT COURSE CLASSROOM TRAINING	.40	5.08	6	8
C92 PREPARE STANDARDIZATION-EVALUATION TESTS OR CHECKLISTS	.37	5.63	1	6
E153 MAKE ENTRIES ON AFTO FORMS 226 (MONTHLY STORAGE BATTERY RECORD)	.37	3.50	2	2
D114 ESTABLISH STUDY REFERENCE FILES	.33	3.68	3	5
D117 EVALUATE RESIDENT COURSE STUDENT PROGRESS	.33	4.91	3	5
D121 PREPARE LESSON PLANS	.33	6.30	5	14
C68 EVALUATE AND SELECT INDIVIDUALS FOR SPECIALIZED TRAINING	.30	4.62	1	11
D122 PREPARE TRAINING AIDS, SPACE, OR EQUIPMENT	.30	4.55	5	10
E127 CHART MONTHLY FLYING/ALERT SCHEDULES	.30	4.66	1	8
B48 INITIATE PERSONNEL ACTION REQUESTS	.27	4.05	1	7
C59 ADMINISTER EMERGENCY PROCEDURES TESTS	.27	3.61	1	7
D109 DETERMINE RESIDENT COURSE TRAINING REQUIREMENTS	.27	3.61	1	7
D111 DEVELOP TRAINING AIDS	.27	5.09	4	12
D123 SCORE TESTS	.20	2.96	6	14
A21 PLAN EQUIPMENT OR FACILITY MAINTENANCE REQUIREMENTS	.17	5.44	1	6
E135 MAINTAIN MASTER IDENTIFICATION (ID) LISTINGS	.17	3.33	3	4

TABLE 25

TASKS PERFORMED AND NOT REFERENCED TO 328X5 STS
(30 PERCENT OR MORE PERFORMING WITH HIGH TNG EMP - OR HIGHER)

TASKS	TRAINING EMPHASIS	PERCENT MEMBERS PERFORMING			TASK DIFFICULTY
		3-SKILL LEVEL	5-SKILL LEVEL	7-SKILL LEVEL	
F191 RESEARCH MICROFICHE FOR PART INFORMATION	5.63	74	59	64	4.11

TABLE 26

POI BLOCKS REFLECTING LOW FIRST ENLISTMENT TASK PERFORMANCE
(LESS THAN 30 PERCENT PERFORMING)

POI REFERENCE BLOCK-UNIT	TASK	TRAINING EMPHASIS*	TASK DIFFICULTY	PERCENT MEMBERS PERFORMING	
				FIRST JOB (N=31)	FIRST ENLISTMENT (N=102)
VII-6D	I217 CLEAN CODE MATRIX READERS	2.97	3.15	3	5
	I219 CLEAN READ/WRITE HEADS	2.77	2.76	19	18
	I246 PERFORM CORROSION CONTROL OTHER THAN AS PART OF INSPECTIONS OR BENCH CHECK	2.53	3.98	13	14
VII-8A	I259 PERFORM TIME COMPLIANCE TECHNICAL ORDER (TCO) MODIFICATIONS OF AIRBORNE COMMUNICATIONS EQUIPMENT	2.20	5.27	16	22
VII-11B	E154 MAKE ENTRIES ON AFTO FORMS 244 (SYSTEM/EQUIPMENT STATUS RECORD)	3.07	3.83	6	26
	G201 MAKE ENTRIES OF JOB/STATUS FORMS	1.30	3.62	13	7
	G200 MAKE ENTRIES ON AIRCRAFT HISTORY FORMS	1.13	3.73	16	13
XII-7A	Z902 SELF-CHECK OR CALIBRATE AUTOMATIC SWITCHBOARD TEST SETS	3.00	6.14	10	5
	Z867 ISOLATE MALFUNCTIONS IN AUTOMATIC SWITCHBOARD TEST SETS	2.80	6.88	10	8
XII-7B	N507 BENCH CHECK SB2059/ATC-1 SWITCHBOARD SYSTEM CARDS	4.47	6.33	26	21
XV-5B	Z848 ALIGN AN/ARM-114 UHF AM/FM RADIO RECEIVER/TRANSMITTER TEST SETS	3.37	5.56	23	26
	Z892 REPLACE AN/ARM-114 UHF AM/FM RADIO RECEIVER/ TRANSMITTER TEST SET SRU OR COMPONENTS	3.07	5.29	19	27

* AVERAGE TE = 2.47; "HIGH" TE = 3.98 AND ABOVE

IMPLICATIONS

Overall, this occupational survey revealed no significant structural problem areas in the 328X5 career ladder. Job satisfaction figures and the few write-in comments seem to indicate that 328X5 airmen, for the most part, are pleased with their jobs.

A review of AFR 39-1 revealed that the current description was complete, and accurately portrayed the 3-, 5-, and 7-skill level DAFSCs.

In terms of the training analysis, one item of the STS should be examined by subject-matter specialists to determine whether it should be added; several POI paragraphs were identified as requiring review.

APPENDIX A
REPRESENTATIVE TASKS FOR CAREER LADDER STRUCTURE GROUPS

TABLE A1
GENERAL EQUIPMENT REPAIR PERSONNEL CLUSTER
(GRP064)

TASKS	PERCENT MEMBERS PERFORMING (N=90)
L375 ISOLATE MALFUNCTIONS TO UHG-AM/FM C-3811/AR CONTROL BOXES	100
L374 ISOLATE MALFUNCTIONS TO AN/ART-47 TRANSMITTER SYSTEM LRU	99
L373 ISOLATE MALFUNCTIONS TO AN/ART-47 TRANSMITTER SYSTEMS	99
L379 OPERATIONALLY CHECK AN/ARR-71 RECEIVER SYSTEMS	98
I223 INTERPRET BLOCK DIAGRAMS FOR FAULT ISOLATION	98
L394 REPLACE UHF-AM/FMC-3811/AR CONTROL BOXES	98
L377 ISOLATE MALFUNCTIONS TO UHF-AM/FM RECEIVER TUNER LRU	98
I242 MONITOR OPERATION OF ABNCP COMMUNICATIONS EQUIPMENT	97
L369 ISOLATE MALFUNCTIONS TO AN/ARR-71 RECEIVER SYSTEMS	97
R576 ISOLATE MALFUNCTIONS TO LF/VLF 20KW TRANSMITTERS	97
L381 OPERATIONALLY CHECK AN/ART-47 TRANSMITTER SYSTEMS	97
I277 VERIFY AIRBORNE PERFORMANCE MONITOR (APM) USING COMMUNICATIONS SYSTEMS ANALYZERS (CSA)	97
L385 REPLACE AN/ARR-71 RECEIVER SYSTEM LRU	96
0523 ISOLATE MALFUNCTIONS TO C7757/ARC-89 CONTROL MONITORS (BRAIN BUCKET)	96
R595 TUNE LF/VLF 20 KW TRANSMITTERS	96
J294 ISOLATE MALFUNCTIONS TO SULPHUR HEXAFLUORIDE (SF-6) SYSTEMS	96
0525 OPERATIONALLY CHECK APM SYSTEMS	94
L393 REPLACE AN/ART-47 TRANSMITTER SYSTEMS	94
L366 ALIGN AN/ART-47 TRANSMITTER SYSTEMS	94
0524 OPERATIONALLY CHECK APM SYSTEM LRU	94
I228 INTERPRET VISUAL FAULT INDICATORS FOR FAULT ISOLATION	94
L364 ALIGN AN/ARR-71 RECEIVER SYSTEMS	94
I227 INTERPRET SCHEMATIC DIAGRAMS FOR FAULT ISOLATION	94
0522 ISOLATE MALFUNCTIONS TO APM SYSTEMS	94
R585 OPERATIONALLY CHECK LF/VLF 20 KW TRANSMITTERS	94
I250 PERFORM MONITOR AND ANALYSIS OF ABNCP COMMUNICATIONS USING AIRBORNE PERFORMANCE MONITORS (APM)	93
E157 MAKE ENTRIES ON AFTO FORMS 781 SERIES (AEROSPACE VEHICLE DOCUMENT SERIES)	93
0519 ISOLATE MALFUNCTIONS IN APM SYSTEM LRU ON-EQUIPMENT	93
0521 ISOLATE MALFUNCTIONS TO APM SYSTEM MONITORS OR INDICATORS	93
0520 ISOLATE MALFUNCTIONS TO APM SYSTEM COMMON TEST EQUIPMENT LRU	93
0518 ALIGN APM SYSTEMS	91
I271 REPLACE MINOR ELECTRICAL HARDWARE, SUCH AS LAMPS, SWITCHES, FUSES, OR CONNECTORS	91
R577 ISOLATE MALFUNCTIONS TO LF/VLF 20 KW TRANSMITTER LRU	91

TABLE A1 (CONTINUED)

SELECTED BACKGROUND INFORMATIONAIRCRAFT MAINTAINED
(10% OR MORE RESPONDING)

EC-135C	67%	EC-135A	22%
E-4B	27%	EC-135G	22%
E-4A	26%	EC-135P	18%
EC-135H	24%		

MAJOR SYSTEMS MAINTAINED
(25% OR MORE RESPONDING)

AIRBORNE PERFORMANCE MONITOR (APM) SYSTEM	98%
AN/ART-47, UHF HIGH POWER TRANSMITTER	98%
AN/ARR-71, UHF RECEIVER SYSTEM	97%
AN/ARC-96, LF/VLF COMMUNICATIONS	94%
AN/ACC-3, MULTIPLEXER	89%
AN/ARC-58, LIAISON/HF RADIO SYSTEM	88%
AN/AIC-18, INTERPHONE	87%
NO-BREAK POWER SUPPLY SYSTEM	87%
AN/ARA-60, TELETYPE DATA SYSTEM	87%
AN/ASC-21(V)1, AFSATCOM TYPE 3	82%
CRYPTOGRAPHIC UNITS KG-33 OR KG-37	76%
AN/FRM-23, COMMUNICATIONS SYSTEMS ANALYZER	75%
AN/AIC-23, PRIVATE INTERPHONE, AND ATC-1(B/S ICS)	72%
DUAL 60HZ CONVERTER	67%
AN/ARA-64, TACSATCOM	66%
CRYPTOGRAPHIC UNIT KW-7	64%
SB-2059A/ATC-1, AUTOMATIC SWITCHBOARD	63%
VHF/FM RADIOTELEPHONE SYSTEM (MOTRAC)	61%
AN/ASQ-121, EVALUATION, ANALYSIS RECORDING SYSTEM (EARS) (HIGH ALTITUDE RADIATION DETECTION SYSTEM HARDS)	58%
AN/ASW-28, AIRBORNE LAUNCH CONTROL CENTER SYSTEM	54%
KY-3A, SECURE VOICE SYSTEM	52%
AN/ARC-34, UHF COMMAND RADIO SYSTEM	50%
RE-544/ARC-89(V), OR RE-594/ARC-89(V) AND RE-593/ARC-89(V)	49%
SB-1366/ARC-89, MANUAL SWITCHBOARD	49%
BROADCAST RECEIVER SYSTEM	48%
AM DROPOUT SYSTEM	47%
AN/AIC-10, INTERPHONE	42%
HYBRID SWITCHING UNITS	42%
BC RADIO SYSTEM	39%
AN/APX-64, IDENTIFY FRIEND OR FOE (IFF) SYSTEM	37%
AN/ARR-68, UHF RECEIVER SYSTEM	37%
AN/ARC-190, LIAISON/HF RADIO SYSTEM	31%
AN/ACC-6, MULTIPLEXER	30%
NATIONWIDE (UHF) RADIO SYSTEM	27%
SB-2870/ATC-1, AUTOMATIC SWITCHBOARD	26%
SEMI-AUTOMATIC TELEPHONE SWITCHING SYSTEM (E-4)	26%

TABLE A2
FLIGHTLINE AND SHOP MAINTENANCE PERSONNEL
(GRP049)

TASKS	PERCENT MEMBERS PERFORMING (N=24)
E156 MAKE ENTRIES ON AFTO FORMS 350 (REPARABLE ITEM PROCESSING TAG)	100
M446 ALIGN AN/ACC-3 MULTIPLEX SYSTEMS	100
M453 ISOLATE MALFUNCTIONS TO AN/ACC-3 MULTIPLEX SYSTEMS	100
M466 REPLACE AN/ACC-3 MULTIPLEX SYSTEM LRU	96
M454 ISOLATE MALFUNCTIONS TO AN/ACC-3 MULTIPLEX SYSTEM LRU	96
I266 REPLACE DISCRETE CIRCUIT COMPONENTS, SUCH AS TRANSISTORS, DIODES, OR RESISTORS	92
F191 RESEARCH MICROFICHE FOR PART INFORMATION	92
L381 OPERATIONALLY CHECK AN/ART-47 TRANSMITTER SYSTEMS	92
L364 ALIGN AN/ARR-71 RECEIVER SYSTEMS	92
I271 REPLACE MINOR ELECTRICAL HARDWARE; SUCH AS LAMPS, SWITCHES, FUSES, OR CONNECTORS	92
W758 OPERATIONALLY CHECK AN/ASW-28 AIRBORNE LAUNCH CONTROL SYSTEM CODE HOLDING POWER SUPPLY LRU	92
W756 OPERATIONALLY CHECK AN/ASW-28 AIRBORNE LAUNCH CONTROL SYSTEM DATA PROCESSING LRU	92
W757 OPERATIONALLY CHECK AN/ASW-28 AIRBORNE LAUNCH CONTROL SYSTEM POWER SUPPLY LRU	92
W759 OPERATIONALLY CHECK AN/ASW-28 AIRBORNE LAUNCH CONTROL	87
M460 OPERATIONALLY CHECK AN/ACC-3 MULTIPLEX SYSTEMS	87
W767 REPLACE AN/ASW-28 AIRBORNE LAUNCH CONTROL SYSTEM DATA PROCESSING LRU	87
W766 OPERATIONALLY CHECK AN/ASW-28 AIRBORNE LAUNCH CONTROL SYSTEM TAPE READERS	87
W760 OPERATIONALLY CHECK AN/ASW-28 AIRBORNE LAUNCH CONTROL SYSTEM STATION 1 LRU	87
W765 OPERATIONALLY CHECK AN/ASW-28 AIRBORNE LAUNCH CONTROL SYSTEM 494L PANELS	87
W769 REPLACE AN/ASW-28 AIRBORNE LAUNCH CONTROL SYSTEM CODE HOLDING POWER SUPPLY LRU	87
W768 REPLACE AN/ASW-28 AIRBORNE LAUNCH CONTROL SYSTEM POWER SUPPLY LRU	87
E155 MAKE ENTRIES ON AFTO FORMS 349 (MAINTENANCE DATA COLLECTION RECORD)	83
I223 INTERPRET BLOCK DIAGRAMS FOR FAULT ISOLATION	83
L379 OPERATIONALLY CHECK AN/ARR-71 RECEIVER SYSTEMS	83
L366 ALIGN AN/ART-47 TRANSMITTER SYSTEMS	83
M470 BENCH CHECK AN/ACC-3 MULTIPLEX SYSTEM LRU	79
I227 INTERPRET SCHEMATIC DIAGRAMS FOR FAULT ISOLATION	79
M473 ISOLATE MALFUNCTIONS IN AN/ACC-3 MULTIPLEX SYSTEM LRU OFF-EQUIPMENT	79

TABLE A2 (CONTINUED)

SELECTED BACKGROUND INFORMATION

AIRCRAFT MAINTAINED
(10% OR MORE RESPONDING)

EC-135C	100%
E-4A	42%
E-4B	42%

MAJOR SYSTEMS MAINTAINED
(25% OR MORE RESPONDING)

AN/ACC-3, MULTIPLEXER	100%
AN/ASQ-121, EVALUATION, ANALYSIS RECORDING SYSTEM (EARS) (HIGH ALTITUDE RADIATION DETECTION SYSTEM HARDS)	92%
VHF/FM RADIOTELEPHONE SYSTEM (MOTRAC)	92%
AIRBORNE PERFORMANCE MONITOR (APM) SYSTEM	88%
SB-2059A/ATC-1, AUTOMATIC SWITCHBOARD	88%
AN/ASW-28, AIRBORNE LAUNCH CONTROL CENTER SYSTEM	83%
AN/ART-47, UHF HIGH POWER TRANSMITTER	83%
AN/ARR-71, UHF RECEIVER SYSTEM	79%
AN/ARC-96, LF/VLF COMMUNICATIONS	71%
AN/FRM-23, COMMUNICATIONS SYSTEMS ANALYZER	71%
AN/AIC-18, INTERPHONE	58%
AN/ASC-21(V)1, AFSATCOM TYPE 3	54%
AN/AIC-23, PRIVATE INTERPHONE, AND ATC-1 (B/S ICS)	50%
BC RADIO SYSTEM	42%
BROADCAST RECEIVER SYSTEM	38%
AM DROPOUT SYSTEM	33%
AN/ASC-21(V)1, AFSATCOM TYPE ICS	25%
CRYPTOGRAPHIC UNITS KG-33 OR KG-37	25%
SEMI-AUTOMATIC TELEPHONE SWITCHING SYSTEM (E-4)	25%

TABLE A3
RECEIVER AND TRANSMITTER REPAIR PERSONNEL
(GRP057)

TASKS	PERCENT MEMBERS PERFORMING (N=7)
M460 OPERATIONALLY CHECK AN/ACC-3 MULTIPLEX SYSTEMS	100
H208 PERFORM MISSION PREPARATION OF ABNCP COMMUNICATIONS SYSTEMS	100
M453 ISOLATE MALFUNCTIONS TO AN/ACC-3 MULTIPLEX SYSTEMS	100
I271 REPLACE MINOR ELECTRICAL HARDWARE; SUCH AS LAMPS, SWITCHES, FUSES, OR CONNECTORS	100
M466 REPLACE AN/ACC-3 MULTIPLEX SYSTEM LRU	100
M446 ALIGN AN/ACC-3 MULTIPLEX SYSTEMS	100
L393 REPLACE AN/ART-47 TRANSMITTER SYSTEM LRU	100
H209 PERFORM PREFLIGHT INSPECTIONS OF ABNCP COMMUNICATIONS SYSTEMS	100
L381 OPERATIONALLY CHECK AN/ART-47 TRANSMITTER SYSTEMS	100
I272 REPLACE NONELECTRICAL HARDWARE, SUCH AS SCREWS, NUTS, EJECTORS, OR COVERS	100
L366 ALIGN AN/ART-47 TRANSMITTER SYSTEMS	100
L379 OPERATIONALLY CHECK AN/ARR-71 RECEIVER SYSTEMS	100
L385 REPLACE AN/ARR-71 RECEIVER SYSTEM LRU	100
L364 ALIGN AN/ARR-71 RECEIVER SYSTEMS	100
E155 MAKE ENTRIES ON AFTO FORMS 349 (MAINTENANCE DATA COLLECTION RECORD)	86
E156 MAKE ENTRIES ON AFTO FORMS 350 (REPARABLE ITEM PROCESSING TAG)	86
M454 ISOLATE MALFUNCTIONS TO AN/ACC-3 MULTIPLEX SYSTEM LRU	86
L369 ISOLATE MALFUNCTIONS TO AN/ARR-71 RECEIVER SYSTEMS	86
L370 ISOLATE MALFUNCTIONS TO AN/ARR-71 RECEIVER SYSTEM LRU	86
L373 ISOLATE MALFUNCTIONS TO AN/ART-47 TRANSMITTER SYSTEMS	86
L374 ISOLATE MALFUNCTIONS TO AN/ART-47 TRANSMITTER SYSTEM LRU	86
I277 VERIFY AIRBORNE PERFORMANCE MONITOR (APM) USING COMMUNICATIONS SYSTEMS ANALYZERS (CSA)	86
I245 PERFORM COMMUNICATIONS SYSTEMS ALIGNMENT (CSA) OF ABNCP COMMUNICATIONS EQUIPMENT	71
I213 CALIBRATE SPECIALIZED TEST EQUIPMENT	71
O518 ALIGN APM SYSTEMS	71
O525 OPERATIONALLY CHECK APM SYSTEMS	71
H207 PERFORM ALERT FUNCTIONS WHILE ON STATION	71
O519 ISOLATE MALFUNCTIONS IN APM SYSTEM LRU ON-EQUIPMENT	71
O521 ISOLATE MALFUNCTIONS TO APM SYSTEM MONITORS OR INDICATORS	71
L380 OPERATIONALLY CHECK AN/ART-42 TRANSMITTER SYSTEMS	71
O522 ISOLATE MALFUNCTIONS TO APM SYSTEMS	71

TABLE A3 (CONTINUED)

SELECTED BACKGROUND INFORMATIONAIRCRAFT MAINTAINED
(10% OR MORE RESPONDING)

EC-135C	86%	E-4A	29%
EC-135A	57%	E-4B	29%
EC-135G	57%		

MAJOR SYSTEMS MAINTAINED
(25% OR MORE RESPONDING)

AIRBORNE PERFORMANCE MONITOR (APM) SYSTEM	100%
AN/ACC-3, MULTIPLEXER	100%
AN/ARC-96, LF/VLF COMMUNICATIONS	86%
AN/ASQ-121, EVALUATION, ANALYSIS RECORDING SYSTEM (EARS) (HIGH ALTITUDE RADIATION DETECTION SYSTEM HARDS)	86%
AN/ARR-71, UHF RECEIVER SYSTEM	86%
DUAL 60HZ CONVERTER	71%
VHF/FM RADIOTELEPHONE SYSTEM (MOTRAC)	71%
AN/ACC-1, MULTIPLEXER	57%
AN/ACC-2, MULTIPLEXER	57%
AN/AIC-18, INTERPHONE	57%
AN/AIC-23, PRIVATE INTERPHONE, AND ATC-1 (B/S ICS)	57%
AN/ARC-58, LIAISON/HF RADIO SYSTEM	57%
AN/ASW-28, AIRBORNE LAUNCH CONTROL CENTER SYSTEM	57%
AN/ARR-68, UHF RECEIVER SYSTEM	57%
AN/ART-42, UHF HIGH POWER TRANSMITTER	57%
HYBRID SWITCHING UNITS	57%
NO-BREAK POWER SUPPLY SYSTEM	57%
SB-2059A/ATC-1, AUTOMATIC SWITCHBOARD	57%
SB-1366/ARC-89, MANUAL SWITCHBOARD	57%
AM DROPOUT SYSTEM	43%
BROADCAST RECEIVER SYSTEM	43%
RD-244/ARC-89(V), TAPE RECORDER SYSTEM	43%
RE-544/ARC-89(V), OR RE-594/ARC-89(V) AND RE-593/ARC-89(V)	43%
ADP COMPUTER SYSTEM	29%
AN/AIC-10, INTERPHONE	29%
AN/ARC-34, UHF COMMAND RADIO SYSTEM	29%
AN/ARC-150 UHF COMMAND RADIO	29%
AN/ARC-190, LIAISON/HF RADIO SYSTEM	29%
AN/ASC-21(V)1, AFSATCOM TYPE 3	29%
AN/URT-26(V), CRASH POSITION INDICATOR SYSTEM	29%
BC RADIO SYSTEM	29%
DUAL TRAILING WIRE ANTENNA SYSTEM (E-4B)	29%
LF/VLF, 200 KW SYSTEM	29%
NATIONWIDE (UHF) RADIO SYSTEM	29%
PUBLIC ADDRESS SYSTEM (E-4)	29%
SB-2870/ATC-1, AUTOMATIC SWITCHBOARD	29%
SEMI-AUTOMATIC TELEPHONE SWITCHING SYSTEM (E-4)	29%
SUPER HIGH FREQUENCY (SHF) SATELLITE COMMUNICATIONS SYSTEM	29%

TABLE A4

AFSATCOM PERSONNEL
(GRP060)

TASKS	PERCENT MEMBERS PERFORMING (N=20)
T712 ISOLATE MALFUNCTIONS IN AFSATCOM RECEIVER-TRANSMITTER LRU OFF-EQUIPMENT	100
T703 BENCH CHECK AFSATCOM RECEIVER-TRANSMITTER LRU	100
T666 OPERATIONALLY CHECK AFSATCOM CONTROL LRU	100
T669 OPERATIONALLY CHECK AFSATCOM INPUT/OUTPUT (I/O) DEVICES	100
T686 REPLACE AFSATCOM RECEIVER-TRANSMITTER LRU	100
T681 REPLACE AFSATCOM CONTROL LRU	100
T683 REPLACE AFSATCOM HIGH POWER AMPLIFIER LRU	100
T721 REPLACE AFSATCOM RECEIVER-TRANSMITTER SRU OR COMPONENTS OFF-EQUIPMENT	95
T671 OPERATIONALLY CHECK AFSATCOM RECEIVER-TRANSMITTER LRU	95
T676 OPERATIONALLY CHECK AFSATCOM TYPE 3A SYSTEMS	95
T654 ISOLATE MALFUNCTIONS TO AFSATCOM RECEIVER-TRANSMITTER LRU	95
T710 ISOLATE MALFUNCTIONS IN AFSATCOM I/O DEVICES OFF-EQUIPMENT	95
T668 OPERATIONALLY CHECK AFSATCOM HIGH POWER AMPLIFIER LRU	95
T653 ISOLATE MALFUNCTIONS TO AFSATCOM MODEM LRU	95
T652 ISOLATE MALFUNCTIONS TO AFSATCOM INPUT/OUTPUT (I/O) DEVICES	95
T691 REPLACE AFSATCOM TYPE 3A SYSTEM LRU	95
T685 REPLACE AFSATCOM MODEM LRU	95
T684 REPLACE AFSATCOM INPUT/OUTPUT (I/O) DEVICES	95
T707 BENCH CHECK AFSATCOM TYPE 3A SYSTEMS LRU	90
T716 ISOLATE MALFUNCTIONS IN AFSATCOM TYPE 3A SYSTEM LRU OFF-EQUIPMENT	90
T701 BENCH CHECK AFSATCOM INPUT/OUTPUT (I/O) DEVICES	90
T661 ISOLATE MALFUNCTIONS TO AFSATCOM TYPE 3A SYSTEM LRU	90
T708 ISOLATE MALFUNCTIONS IN AFSATCOM CONTROL LRU OFF-EQUIPMENT	90
T702 BENCH CHECK AFSATCOM MODEM LRU	90
T711 ISOLATE MALFUNCTIONS IN AFSATCOM MODEM LRU OFF-EQUIPMENT	90
T720 REPLACE AFSATCOM MODEM SRU OR COMPONENTS OFF-EQUIPMENT	90
I267 REPLACE ELECTRONIC EQUIPMENT PINS, CONNECTORS, WIRE WRAPS, OR PLUGS	90
T651 ISOLATE MALFUNCTIONS TO AFSATCOM HIGH POWER AMPLIFIER LRU	90
T718 REPLACE AFSATCOM HIGH POWER AMPLIFIER SRU OR COMPONENTS OFF-EQUIPMENT	90
R582 ISOLATE MALFUNCTIONS TO LF/VLF 616A RECEIVE SYSTEM LRU	90
R581 ISOLATE MALFUNCTIONS TO LF/VLF 616A RECEIVE SYSTEMS	90
T719 REPLACE AFSATCOM INPUT/OUTPUT DEVICE SRU OR COMPONENTS OFF-EQUIPMENT	85

TABLE A4 (CONTINUED)

SELECTED BACKGROUND INFORMATION

AIRCRAFT MAINTAINED
(10% OR MORE RESPONDING)

EC-135H	50%	E-4A	10%
EC-135C	50%	E-4B	10%
EC-135G	25%	EC-135P	10%
EC-135A	25%		

MAJOR SYSTEMS MAINTAINED
(25% OR MORE RESPONDING)

AN/ASC-21(V)1, AFSATCOM TYPE 3	95%
AN/ARC-96, LF/VLF COMMUNICATIONS	90%
AN/ASC-21(V)1, AFSATCOM TYPE 1CX	45%
AN/ARR-71, UHF RECEIVER SYSTEM	45%
AN/ART-47, UHF HIGH POWER TRANSMITTER	45%
AIRBORNE PERFORMANCE MONITOR (APM) SYSTEM	40%
AN/ACC-3, MULTIPLEXER	40%
AN/ACC-6, MULTIPLEXER	40%
AN/ASC-21(V)1, AFSATCOM TYPE 12	40%
AN/FRM-23, COMMUNICATIONS SYSTEMS ANALYZER	40%
CRYPTOGRAPHIC UNITS KG-33 OR KG-37	40%
NO-BREAK POWER SUPPLY SYSTEM	40%
SB-2059A/ATC-1, AUTOMATIC SWITCHBOARD	35%
SB-1366/ARC-89, MANUAL SWITCHBOARD	30%
AN/ARA-60, TELETYPE DATA SYSTEM	25%

TABLE A5
RADIO REPAIR PERSONNEL CLUSTER
(GRP041)

TASKS	PERCENT MEMBERS PERFORMING (N=42)
L416 BENCH CHECK C-3811/AR CONTROL BOXES	98
L403 BENCH CHECK AN/ARR-71 RECEIVERS	95
L413 BENCH CHECK AN/ART-47 POWER SUPPLIES	95
L417 BENCH CHECK UHF-AM/FM RECEIVER TUNERS	95
L424 ISOLATE MALFUNCTIONS IN AN/ARR-71 RECEIVERS OFF-EQUIPMENT	93
L410 BENCH CHECK AN/ART-47 IPA	93
L434 ISOLATE MALFUNCTIONS IN AN/ART-47 POWER SUPPLIES OFF-EQUIPMENT	93
L437 ISOLATE MALFUNCTIONS IN C-3811/AR CONTROL BOXES OFF-EQUIPMENT	93
L438 ISOLATE MALFUNCTIONS IN UHF-AM/FM RECEIVER TUNERS OFF-EQUIPMENT	93
F191 RESEARCH MICROFICHE FOR PART INFORMATION	90
L402 BENCH CHECK AN/ARR-71 RECEIVER SYSTEMS	90
F190 RESEARCH MANUALS FOR PART NUMBERS	88
L414 BENCH CHECK AN/ART-47 SYNTHESIZERS	88
L435 ISOLATE MALFUNCTIONS IN AN/ART-47 SYNTHESIZERS OFF-EQUIPMENT	88
L423 ISOLATE MALFUNCTIONS IN AN/ARR-71 RECEIVER SYSTEMS OFF-EQUIPMENT	88
L401 BENCH CHECK AN/ARR-71 PENTHOUSES	88
L422 ISOLATE MALFUNCTIONS IN AN/ARR-71 PENTHOUSES OFF-EQUIPMENT	88
L411 BENCH CHECK AN/ART-47 PENTHOUSES	88
L379 OPERATIONALLY CHECK AN/ARR-71 RECEIVER SYSTEMS	86
L381 OPERATIONALLY CHECK AN/ART-47 TRANSMITTER SYSTEMS	86
L415 BENCH CHECK AN/ART-47 TRANSMITTER SYSTEMS	86
O535 BENCH CHECK ID 1597/ARC-89 RF POWER MONITORS	86
E155 MAKE ENTRIES ON AFTO FORMS 349 (MAINTENANCE DATA COLLECTION RECORD)	83
L364 ALIGN AN/ARR-71 RECEIVER SYSTEMS	83
L442 REPLACE AN/ART-47 TRANSMITTER SRU OR COMPONENTS OFF-EQUIPMENT	83
L433 ISOLATE MALFUNCTIONS IN AN/ART-47 POWER AMPLIFIERS OFF-EQUIPMENT	83
L366 ALIGN AN/ART-47 TRANSMITTER SYSTEMS	83
L440 REPLACE AN/ARR-71 RECEIVER SRU OR COMPONENTS OFF-EQUIPMENT	83
L412 BENCH CHECK AN/ART-47 POWER AMPLIFIERS	83
L432 ISOLATE MALFUNCTIONS IN AN/ART-47 PENTHOUSES OFF-EQUIPMENT	83
L431 ISOLATE MALFUNCTIONS IN AN/ARR-47 IPA OFF-EQUIPMENT	81
L369 ISOLATE MALFUNCTIONS TO AN/ARR-71 RECEIVER SYSTEMS	81

TABLE A5 (CONTINUED)

SELECTED BACKGROUND INFORMATION

AIRCRAFT MAINTAINED
(10% OR MORE RESPONDING)

EC-135G	52%	EC-135C	26%
EC-135L	36%	EC-135A	21%
EC-135	33%		

MAJOR SYSTEMS MAINTAINED
(25% OR MORE RESPONDING)

AN/ARR-71, UHF RECEIVER SYSTEM	95%
AN/ART-47, UHF HIGH POWER TRANSMITTER	91%
AIRBORNE PERFORMANCE MONITOR (APM) SYSTEM	79%
AN/ART-42, UHF HIGH POWER TRANSMITTER	69%
AN/FRM-23, COMMUNICATIONS SYSTEMS ANALYZER	67%
AN/ARR-68, UHF RECEIVER SYSTEM	66%
HYBRID SWITCHING UNITS	60%
AN/ACC-3, MULTIPLEXER	57%
RD-244/ARC-89(V), TAPE RECORDER SYSTEM	57%
AN/ACC-1, MULTIPLEXER	55%
AN/AIC-18, INTERPHONE	52%
SB-1366/ARC-89, MANUAL SWITCHBOARD	43%
AN/ARC-96, LF/VLF COMMUNICATIONS	41%
AM DROPOUT SYSTEM	36%
AN/ACC-6, MULTIPLEXER	36%
AN/ARC-34, UHF COMMAND RADIO SYSTEM	31%
SB-2059A/ATC-1, AUTOMATIC SWITCHBOARD	26%

TABLE A6

SUPERVISORY PERSONNEL
(GRP035)

TASKS	PERCENT MEMBERS PERFORMING (N=15)
A8 DETERMINE WORK PRIORITIES	100
A7 DETERMINE SUPPLY REQUIREMENTS	93
B49 INTERPRET POLICIES, DIRECTIVES, OR PROCEDURES FOR SUBORDINATES	87
C70 EVALUATE COMPLIANCE WITH PERFORMANCE STANDARDS	87
B52 SUPERVISE AIRBORNE COMMAND POST COMMUNICATIONS EQUIPMENT SPECIALISTS (AFSC 32855)	87
C89 PREPARE APRs	
C62 CERTIFY STATUS OF REPARABLE, SERVICEABLE, OR CONDEMNED PARTS	87
F186 MAKE ENTRIES ON DD FORMS 1574 (SERVICEABLE TAG-MATERIAL)	87
F187 MAKE ENTRIES ON DD FORMS 1577 (UNSERVICEABLE (CONDEMNED) TAG MATERIAL)	87
D106 COUNSEL TRAINEES ON TRAINING PROGRESS	87
A17 ESTABLISH PERFORMANCE STANDARDS FOR SUBORDINATES	80
D103 CONDUCT OJT	80
B53 SUPERVISE AIRBORNE COMMAND POST COMMUNICATIONS EQUIPMENT TECHNICIANS (AFSC 32875)	80
A25 PLAN WORK ASSIGNMENTS	80
C85 INDORSE AIRMAN PERFORMANCE REPORTS (APRs)	80
C73 EVALUATE INDIVIDUALS FOR RECOGNITION	80
A19 PARTICIPATE IN MEETINGS, SUCH AS STAFF MEETINGS, BRIEFINGS, CONFERENCES, OR WORKSHOPS	80
A30 SCHEDULE TEMPORARY DUTY, LEAVES, PASSES, OR ALERT DUTY	80
E171 PREPARE SCHEDULES OR ROSTERS, SUCH AS SHIFT SCHEDULES OR RECALL ROSTERS	80
D102 ASSIGN ON-THE-JOB TRAINING (OJT) TRAINERS	80
F183 MAKE ENTRIES ON AF FORMS 2005 (ISSUE/TURN-IN REQUEST)	80
F191 RESEARCH MICROFICHE FOR PART INFORMATION	80
B44 IMPLEMENT SAFETY PROGRAMS	80
F192 VERIFY DUE-IN-FROM MAINTENANCE (DIFM) DOCUMENT LISTINGS	73
B38 DIRECT IN-SHOP MAINTENANCE OF ABNCP COMMUNICATIONS EQUIPMENT	73
D119 MAINTAIN TRAINING RECORDS, CHARTS, OR GRAPHS OTHER THAN MMICS WORKCENTER LISTINGS	73
B57 SUPERVISE APPRENTICE AIRBORNE COMMAND POST COMMUNICATIONS EQUIPMENT SPECIALISTS (AFSC 32835)	73
C68 EVALUATE AND SELECT INDIVIDUALS FOR SPECIALIZED TRAINING	73
D108 DETERMINE OJT TRAINING REQUIREMENTS	73
B46 IMPLEMENT SELF-INSPECTION PROGRAMS	73

TABLE A6 (CONTINUED)

SELECTED BACKGROUND INFORMATIONAIRCRAFT MAINTAINED
(10% OR MORE RESPONDING)

EC-135C	40%	EC-135A	13%
EC-135G	26%	EC-135J	13%
E-4A	13%	EC-135L	13%
E-4B	13%		

MAJOR SYSTEMS MAINTAINED
(25% OR MORE RESPONDING)

AIRBORNE PERFORMANCE MONITOR (APM) SYSTEM	73%
AN/ACC-3, MULTIPLEXER	73%
AN/ARR-71, UHF RECEIVER SYSTEM	73%
AN/ART-47, UHF HIGH POWER TRANSMITTER	73%
AN/AIC-18, INTERPHONE	60%
AN/ARC-96, LF/V COMMUNICATIONS	60%
SB-2059A/ATC-1, AUTOMATIC SWITCHBOARD	60%
AM DROPOUT SYSTEM	47%
AN/ACC-1, MULTIPLEXER	47%
AN/ASQ-121, EVALUATION, ANALYSIS RECORDING SYSTEM (EARS) HIGH ALTITUDE RADIATION DETECTION SYSTEM HARDWARE)	47%
AN/FRM-23, COMMUNICATIONS SYSTEMS ANALYZER	47%
HYBRID SWITCHING UNITS	47%
RD-244/ARC-89(V), TAPE RECORDER SYSTEM	40%
AN/ARA-64, TACSATCOM	33%
AN/ASC-21(V)1, AFSATCOM TYPE 3	33%
VHF/FM RADIOTELEPHONE SYSTEM (MOTRAC)	33%
AN/ACC-6, MULTIPLEXER	27%
AN/AIC-23, PRIVATE INTERPHONE, AND ATC-1 (B/S ICS)	27%
AN/ARR-68, UHF RECEIVER SYSTEM	27%
AN/ART-42, UHF HIGH POWER TRANSMITTER	27%
CRYPTOGRAPHIC UNITS KG-33 OR KG-37	27%
NO-BREAK POWER SUPPLY SYSTEM	27%

TABLE A7
FORMAL TRAINING PERSONNEL
(GRP053)

TASKS	PERCENT MEMBERS PERFORMING (N=17)
D104 CONDUCT RESIDENT COURSE CLASSROOM TRAINING	100
D121 PREPARE LESSON PLANS	100
D106 COUNSEL TRAINEES ON TRAINING PROGRESS	100
D124 WRITE TEST QUESTIONS	100
D100 ADMINISTER TESTS OTHER THAN AIRCREW MEMBER TESTING	94
D111 DEVELOP TRAINING AIDS	82
D117 EVALUATE RESIDENT COURSE STUDENT PROGRESS	65
B33 COUNSEL PERSONNEL ON PERSONAL OR MILITARY RELATED MATTERS	65
E152 MAKE ENTRIES ON AFTO FORMS 22 (TECHNICAL ORDER SYSTEM PUBLICATION IMPROVEMENT REPORT AND REPLY	59
E163 PERFORM INVENTORIES OF CLASSIFIED ACCOUNTABLE ITEMS	53
D107 DEMONSTRATE HOW TO LOCATE TECHNICAL INFORMATION INCLUDING MICROFICHE DATA	53
D122 PROCURE TRAINING AIDS, SPACE, OR EQUIPMENT	41
D118 EVALUATE TRAINING METHODS OR TECHNIQUES	41
D119 MAINTAIN TRAINING RECORDS, CHARTS, OR GRAPHS OTHER THAN MMICS WORKCENTER LISTINGS	41
D109 DETERMINE RESIDENT COURSE TRAINING REQUIREMENTS	35
E129 ESCORT VISITORS THROUGH FACILITIES	35
A19 PARTICIPATE IN MEETINGS, SUCH AS STAFF MEETINGS, BRIEFINGS, CONFERENCES, OR WORKSHOPS	35

SELECTED BACKGROUND INFORMATION

AIRCRAFT MAINTAINED
(10% OR MORE RESPONDING)

NONE

MAJOR SYSTEMS MAINTAINED
(25% OR MORE RESPONDING)

AN/ARC-96, LF/VLF COMMUNICATIONS	41%
AN/ASC-21(V)1, AFSATCOMTYPE 3	35%
CRYPTOGRAPHIC UNITS KG-33 OR KG-37	29%

END

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